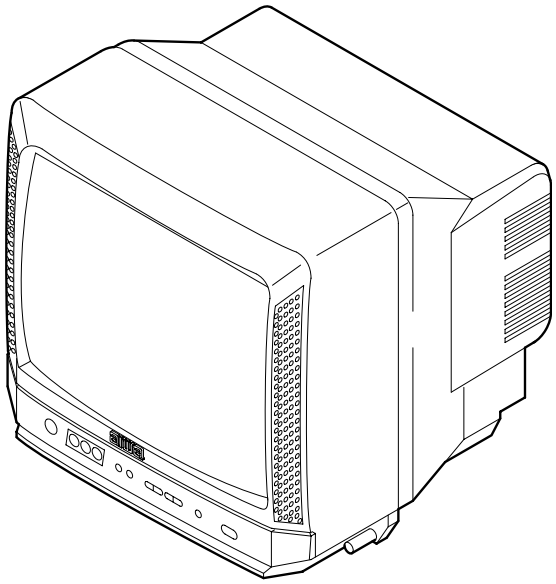
aiwa SERVICE

TV-FT2588 SHA, SHR



SERVICE MANUAL

COLOR TELEVISION

- This Service Manual is the “Revision Publishing” and replaces “Simple Manual” of TV-FT2588 <SHA, SHR>, (S/M Code No. 09-005-433-6T1).
- This Service Manual does not include “DISASSEMBLY INSTRUCTIONS” and “ADJUSTMENT”. These items will be issued in the next supplement.

aiwa

S/M Code No. 09-007-433-6R1

REVISION DATA

To make the best use of this equipment, make sure to obey the following items when repairing (or mending).

1. Do not damage or melt the tunicate of the leading wire on the AC1 side, including the power supply cord.
2. Do not soil or stain the letters on the spec. inscription plates, notice labels, fuse labels, etc.
3. When repairing the part extracted from the conducted side of the board pattern, fix it firmly with applying bond to the pattern and the part.
4. Restore the following items after repairing.
   1) Conditions of soldering of the wires (especially, the distance on the AC1 side).
   2) Conditions of wiring, bundling of wires, etc.
   3) Types of the wries.
   4) Attachment conditions of all types of the insulation.
5. After repairing, always measure the insulation resistance and perform the voltage-withstand test (See Fig-1).

1) The insulation resistance must be 6 MΩ to 10 MΩ when applying 500V per second.
2) In the voltage withstand test, apply 1 kV for 1 min and check that the GO lamp lights.

* Breaking current set to 10 mA.
* Connect the safety checker as shown in Fig-1, then measure the resistance and perform the test.
* Do not touch the equipment during testing.
* For details of the safety checker, refer to the supplied Operation manual.

Insulation resistance: 6 MΩ to 10 MΩ (500 V/s)
Voltage-withstand: 1 kV for 1 min

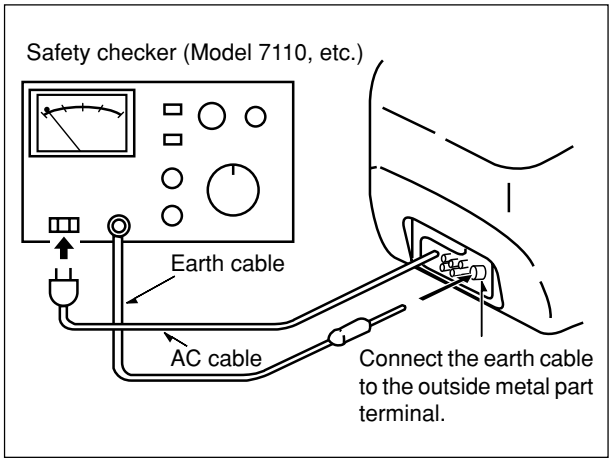


Fig-1

When servicing and checking on the TV, note the followings.

1. Keep the notices.
   As for the places which need special attentions, they are indicated with labels or seals on the cabinet, chassis and parts. Make sure to keep the indications and notices in the operation manual.
2. Avoid an electric shock.
   There is a high voltage part inside. Avoid an electric shock while the electric current is flowing.
3. Use the designated parts.
   The parts in this equipment have the specific characteristics of incombustibility and withstand voltage for safety.
   Therefore, use a part which has the same character as the replaced part. Especially as to the important parts for safety which is indicated in the circuit diagram or the table of parts with a ⚠ mark, the designated parts must be used.
4. Put parts and wires in the original position after assembling or wiring.
   There are parts which use the insulation material such as a tube or tape for safety, or which are assembled so that these parts do not make contact with the printed board. The inside wiring is designed not to get close to the pyrogenic parts and high voltage parts. Therefore, put these parts in the original positions.
5. Take care of the cathode-ray tube.
   By setting an explosion-proof cathode-ray tube in this equipment, safety is secured against implosion. However, when removing it or servicing from the back, it gives out shock that is dangerous. Take enough care to deal with it.
6. Avoid an X-ray.
   Safety is secured against an X-ray by giving considerations to the cathode-ray tube and the high voltage peripheral circuit, etc. Therefore, when repairing the high voltage peripheral circuit, use the designated parts and do not change the circuit. Repairing, except indicates, causes rising of high voltage, and the cathode-ray tube emits an X-ray.
7. Perform a safety check after servicing.
   Confirm that the screws, parts and wiring which were removed in order to service are put in the original positions, or whether there are deteriorated portions around the places serviced.

⚠ Safety Components Symbol

This symbol is given to important parts which serve to maintain the safety of the product, and which are made to confirm to special Safety Specifications.
Therefore, when replacing a component with this symbol make absolutely sure that you use a designated part.

SPECIFICATIONS

Tuner System	Frequency synthesized tuner
TV System	PAL (B/G, H, I, D, K) SECAM (B/G, I, D/K, K1) NTSC(M)
Channel Coverage	VHF: E2 to E12, R1 to R12 UHF: 21 to 69 CATV: S1 to S41
Program Memory	100 TV stations
Antenna Input	75 ohms, unbalanced
Picture Tube	25"
Screen Size	478 (W) X 359 (H) mm ($18^{7}/_{8}$ X $14^{1}/_{4}$ in.) 598 mm (diagonal) ($23^{5}/_{8}$ in.)
Video Input /Output	1 Vp-p 75 ohms
Audio Input	-8 dBs., more than 33 k ohms
Audio Output	-8 dBs., less than 2.2 k ohms 10 W+10 W (10 % Harmonic distortion)
Speaker	60 X 120 mm ($2^{3}/_{8}$ X $4^{3}/_{4}$ in.)
Operating Voltage	110 - 240 V AC, 50/60 Hz
Power Consumption	125 W (Standby mode: 13 W)
Phones Jack	Stereo-mini jack
Operating Temperature	5 °C – 40 °C
Operating Humidity	35 % – 80 %
Dimensions	690 (W) X 506 (H) X 485 (D) mm ($27^{1}/_{4}$ x 20 x $19^{1}/_{8}$ in.)
Weight	32.5 kg (71.5 lbs.)

• Design and specifications are subject to change without notice.

ACCESSORIES / PACKAGE LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-JEG-901-010		IB,SH (ECAP) FT2188/2588-M
2	8A-JEG-951-010		RC UNIT,RC-AVT04

ELETRICAL MAIN PARTS LIST

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
IC			
	87-A21-433-010		IC,KS24C041I
	87-017-804-010		IC,BU4052BC
	87-A21-723-010		IC,TB1240AN AJE-H
	87-A21-166-010		IC,TA1275AZ
	87-A21-259-010		IC,MM1454XD
	87-A21-345-010		IC,NJM2150
	87-A20-312-010		IC,M62420SP
	87-A21-299-010		IC,LA6458SLL
	87-A21-169-010		IC,MM1124B
	87-A21-283-010		IC,AN5277
	87-A21-456-010		IC,LA7833
	87-070-417-010		IC,NJM4558 DD
	87-A21-261-010		IC,MSP3417D
	87-A21-287-010		IC,SAA5261PS/222
	87-A21-062-010		IC,M24C02-BN6
	87-A21-344-010		IC,STR-F6656
	87-A20-527-010		IC,KIA7805PI
	87-A20-364-010		IC,KIA7809PI
	8A-JEE-651-010		IC,TMP87CP38N-1N14<SHA>
	8A-JEE-652-010		IC,TMP87CP38N-1N15 THAI<SHR>
	87-A21-133-080		IC,BMR-0101D
	87-A91-538-010		RCR UNIT,SBX1981-72P
TRANSISTOR			
	87-A30-090-080		FET,2SK2541
	87-A30-091-080		FET,2SJ460
	89-337-794-580		TR,2SC3779 D/E
	87-A30-066-080		TR,2SA1175FE
	87-A30-065-080		TR,2SC2785FE
	89-109-504-080		TR,2SA950
	87-026-218-080		TR,DTC144ES (0.2W)
	87-A30-121-080		TR,DTC 323 TS
	87-A30-366-010		TR,2SD2580
	89-334-674-580		TR,2SC3467 D/E
	87-A30-363-010		TR,2SD2531
	89-324-122-080		C-TR,2SC2412K
	87-A21-457-010		IC,SE120N
	89-110-155-080		TR,2SA1015GR
	87-A30-344-010		TR,2SC5147D
	89-347-930-010		TR,2SC4793
	89-118-370-010		TR,2SA1837
	87-026-462-080		TR,2SC1740SRS
	87-026-463-080		TR,2SA933SRS
	89-407-742-080		TR,2SD774
DIODE			
	87-070-345-080		DIODE,IN4148
	87-A40-347-080		ZENER,MTZJ2.2B
	87-070-444-080		ZENER,HZS33-1TA
	87-A40-235-080		ZENER,MTZJ9.1C
	87-A40-350-080		ZENER,MTZJ 4.7C
	87-070-092-080		DIODE,S5566B
	87-A40-286-080		DIODE,RGP10JE-5025
	87-A40-794-080		DIODE,EGP20G
	87-A40-735-090		DIODE,ERC06-15
	87-017-593-090		DIODE,RGP15J
	87-017-654-060		DIODE,GBU6J
	87-A40-509-080		ZENER,MTZJ6.8C
	87-A40-450-090		DIODE,RU 1P
	87-A40-850-090		DIODE,RL4A
	87-A40-354-090		DIODE,UF3GL-6251
	87-A40-611-080		ZENER,MTZJ3.9B
	87-A40-736-080		DIODE,IN4148(SEM)
	87-017-650-080		DIODE,1SS119
	87-A40-503-080		ZENER,MTZJ39B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
MAIN C.B			
C1	87-A11-073-080		CAP,TC U 22P-50 J CH
C2	87-A11-073-080		CAP,TC U 22P-50 J CH
C3	87-010-405-080		CAP, ELECT 10-50V
C4	87-018-134-080		CAPACITOR,TC-U 0.01-16
C5	87-010-263-080		CAP, ELECT 100-10V
C6	87-018-119-080		CAP, CER 100P-50V
C7	87-010-405-080		CAP, ELECT 10-50V
C8	87-010-405-080		CAP, ELECT 10-50V
C9	87-018-134-080		CAPACITOR,TC-U 0.01-16
C10	87-018-119-080		CAP, CER 100P-50V
C11	87-018-119-080		CAP, CER 100P-50V
C13	87-010-405-080		CAP, ELECT 10-50V
C14	87-018-129-080		CAP, CER 680P-50V
C15	87-018-149-080		CAP,TC-U 15P-50 CH
C16	87-018-149-080		CAP,TC-U 15P-50 CH
C17	87-010-404-080		CAP, ELECT 4.7-50V
C101	87-010-404-080		CAP, ELECT 4.7-50V
C102	87-018-134-080		CAPACITOR,TC-U 0.01-16
C103	87-010-384-080		CAP, ELECT 100-25V
C104	87-018-134-080		CAPACITOR,TC-U 0.01-16
C105	87-010-263-080		CAP, ELECT 100-10V
C106	87-A10-207-080		CAP,TCS 0.01-50KBUP050
C107	87-018-134-080		CAPACITOR,TC-U 0.01-16
C108	87-018-132-080		CAP, CER 2200P-16V
C110	87-018-132-080		CAP, CER 2200P-16V
C111	87-018-132-080		CAP, CER 2200P-16V
C113	87-010-260-080		CAP, ELECT 47-25V
C116	87-010-260-080		CAP, ELECT 47-25V
C117	87-018-134-080		CAPACITOR,TC-U 0.01-16
C121	87-018-134-080		CAPACITOR,TC-U 0.01-16
C122	87-010-260-080		CAP, ELECT 47-25V
C123	87-018-134-080		CAPACITOR,TC-U 0.01-16
C124	87-010-401-080		CAP, ELECT 1-50V
C125	87-018-134-080		CAPACITOR,TC-U 0.01-16
C126	87-010-544-080		CAP, ELECT 0.1-50V
C127	87-018-119-080		CAP, CER 100P-50V
C128	87-018-134-080		CAPACITOR,TC-U 0.01-16
C129	87-018-134-080		CAPACITOR,TC-U 0.01-16
C130	87-010-405-080		CAP, ELECT 10-50V
C131	87-010-405-080		CAP, ELECT 10-50V
C132	87-010-260-080		CAP, ELECT 47-25V
C152	87-010-384-080		CAP, ELECT 100-25V
C301	87-010-545-080		CAP, ELECT 0.22-50V
C302	87-018-132-080		CAP, CER 2200P-16V
C303	87-018-148-080		CAP,TC-U 12P-50 CH
C307	87-018-134-080		CAPACITOR,TC-U 0.01-16
C308	87-010-385-080		CAP,E 220-25 M SME
C309	87-018-147-080		CAP,TC-U 10P-50 CH
C310	87-018-147-080		CAP,TC-U 10P-50 CH
C311	87-018-147-080		CAP,TC-U 10P-50 CH
C312	87-010-404-080		CAP, ELECT 4.7-50V
C313	87-018-119-080		CAP, CER 100P-50V
C314	87-010-401-080		CAP, ELECT 1-50V
C315	87-018-196-080		CAP, CER 1500P-16V
C316	87-010-400-080		CAP, ELECT 0.47-50V
C317	87-015-997-090		CAP, E 2200-16 M SME
C318	87-018-134-080		CAPACITOR,TC-U 0.01-16
C319	87-010-400-080		CAP, ELECT 0.47-50V
C320	87-010-384-080		CAP, ELECT 100-25V
C321	87-018-134-080		CAPACITOR,TC-U 0.01-16
C323	87-018-209-080		CAP, CER 0.1-50V
C324	87-018-209-080		CAP, CER 0.1-50V
C328	87-010-400-080		CAP, ELECT 0.47-50V
C330	87-018-134-080		CAPACITOR,TC-U 0.01-16
C333	87-018-134-080		CAPACITOR,TC-U 0.01-16
C334	87-010-263-080		CAP, ELECT 100-10V
C335	87-010-401-080		CAP, ELECT 1-50V
C336	87-018-134-080		CAPACITOR,TC-U 0.01-16

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C337	87-010-401-080		CAP, ELECT 1-50V
C338	87-010-401-080		CAP, ELECT 1-50V
C339	87-010-263-080		CAP, ELECT 100-10V
C340	87-018-134-080		CAPACITOR,TC-U 0.01-16
C341	87-018-134-080		CAPACITOR,TC-U 0.01-16
C344	87-010-263-080		CAP, ELECT 100-10V
C501	87-018-126-080		CAP,TC-U 390P-50 B
C503	87-010-247-080		CAP, ELECT 100-50V
C508	87-010-402-080		CAP, ELECT 2.2-50V
C511	87-A11-245-080		CAP,M/P 0.1-100 J TF-ECQV
C512	87-A10-011-090		CAP,E 2200-25 SMG
C513	87-018-127-080		CAP, CER 470P-50V
C601	87-A10-406-010		CAP,CER 270P-2K K BN DE
C603	87-A10-052-080		CAP,E 2.2-250
C606	87-016-515-080		CAP,CER 1000P-1K B
C607	87-010-397-090		CAP,E 1000-35 SME
C609	87-010-386-080		CAP,E330-25 SME
C616	87-018-132-080		CAP, CER 2200P-16V
C617	87-010-976-080		CAP,CER 1000P-500 B
C618	87-010-974-080		CAP,CER 220P-500 B
C619	87-016-215-080		CAP,E 1-160 M TWSS
⚠ C801	87-A10-688-090		CAP,M/P 0.22-275 K (B81133)
⚠ C802	87-A10-688-090		CAP,M/P 0.22-275 K (B81133)
⚠ C805	87-A10-517-010		CAP,CER 3300P-4K M E KX
C807	87-A10-646-090		CAP,E 220-400 SMH (25.4*40)
C808	87-A11-825-080		CAP,CER 120P-2K J SL
C809	87-018-131-080		CAP, CER 1000P-50V
C810	87-010-384-080		CAP, ELECT 100-25V
C811	87-018-127-080		CAP, CER 470P-50V
C812	87-018-129-080		CAP, CER 680P-50V
C813	87-A10-626-090		CAP,M/P 0.01-1250 J
C814	87-A11-779-090		CAP,M/P 1000P-1.6K J ECWH(VB)
C815	87-A11-779-090		CAP,M/P 1000P-1.6K J ECWH(VB)
C816	87-A11-260-090		CAP,M/P 1000P-1.6K H ECWH(VR)
C817	87-A10-731-090		CAP,E 220-160 M KMF
C818	87-A12-051-090		CAP,E 100-160 M SK
C822	87-A10-832-080		CAP,CER 1000P-1K K R
C823	87-016-051-090		CAP,E 2200-35 SMG
C824	87-010-397-090		CAP,E 1000-35 SME
C826	87-010-235-080		CAP,E 470-16 SME
C827	87-010-405-080		CAP, ELECT 10-50V
C828	87-010-405-080		CAP, ELECT 10-50V
C829	87-A10-469-080		CAP,CER 2200P-500 K B DD10
C830	87-010-405-080		CAP, ELECT 10-50V
C831	87-010-405-080		CAP, ELECT 10-50V
C832	87-010-405-080		CAP, ELECT 10-50V
C833	87-010-405-080		CAP, ELECT 10-50V
C836	87-018-134-080		CAPACITOR,TC-U 0.01-16
C901	87-010-405-080		CAP, ELECT 10-50V
C902	87-010-401-080		CAP, ELECT 1-50V
C903	87-010-401-080		CAP, ELECT 1-50V
C904	87-010-221-080		CAP, ELECT 470-10V
C905	87-010-405-080		CAP, ELECT 10-50V
C906	87-010-405-080		CAP, ELECT 10-50V
C907	87-010-405-080		CAP, ELECT 10-50V
C908	87-010-401-080		CAP, ELECT 1-50V
C909	87-010-401-080		CAP, ELECT 1-50V
C910	87-010-401-080		CAP, ELECT 1-50V
C911	87-010-401-080		CAP, ELECT 1-50V
C912	87-010-260-080		CAP, ELECT 47-25V
C913	87-018-134-080		CAPACITOR,TC-U 0.01-16
C914	87-018-134-080		CAPACITOR,TC-U 0.01-16
C915	87-018-203-080		TC,U 8200P-16 N Y UP050
C916	87-018-203-080		TC,U 8200P-16 N Y UP050
C918	87-018-134-080		CAPACITOR,TC-U 0.01-16
C919	87-018-134-080		CAPACITOR,TC-U 0.01-16
C930	87-018-117-080		CAP,TC U 68P-50 J SL UP050
CF201	87-A90-224-080		FLTR, TPS6.0MB
CF202	87-008-578-080		FLTR,TPS6.5MB2
CF203	84-LB3-626-080		FLTR,TPS4.5MB2
CF204	87-008-577-080		FLTR,TPS5.5MB2
CF205	87-008-574-080		FLTR,SFSH4.5MCB
CN1	87-A60-446-010		CONN,7P V TID-X
CN2	87-A60-734-010		CONN,8P JL-BT
CN3	87-A60-731-010		CONN,5P JL-BT
CN101	87-A60-734-010		CONN,8P JL-BT
CN102	87-A60-732-010		CONN,6P JL-BT
CN601	87-099-762-010		CONN,5P TBL-P V BOSS
CN603	87-A60-003-010		CONN,2P V TBL-P BOSS
⚠ CN801	87-A61-045-010		CONN,2P V THL-P
⚠ CN802	82-481-649-010		PLUG,2P MINI(*)
CNA301	84-LB2-631-010		CONN ASSY,5P TN-4
CNA302	8A-JEE-641-010		CONN ASSY,3P 2.0MM TV-NK
CNA501	8A-JEA-660-010		CONN ASSY,5P MAIN-PIN
CNA601	8A-JEE-640-010		CONN ASSY,3P 2.5MM 120V-NK
CNA603	8A-JEH-660-010		CONN ASSY,2P MAIN-PIN
CNA605	8A-JEH-661-010		CONN ASSY,1P BLK MAIN-PIN
CNA801	8Z-JB9-663-010		CONN ASSY,8P V AU PW 200
CNA802	8Z-JB4-658-010		CONN ASSY,5P MAIN-NK 20'/21'
CNA901	8Z-JB9-662-010		CONN ASSY,6P V AU L/R 300
CNA903	8Z-JB9-661-010		CONN ASSY,10P MAIN-AUDIO
⚠ D801	87-A91-641-010		VRIS,SI0V-S14K300
D9	87-A40-422-010		LED,SLP-581D-51 Y-G/R
⚠ F801	87-035-458-010		FUSE,4A 250V T W/C
FB1	87-003-320-080		F-BEAD,FBR07HA121NB-00
FB601	87-003-320-080		F-BEAD,FBR07HA121NB-00
FB801	87-003-320-080		F-BEAD,FBR07HA121NB-00
FB802	87-003-320-080		F-BEAD,FBR07HA121NB-00
FB805	87-003-320-080		F-BEAD,FBR07HA121NB-00
FB806	87-003-320-080		F-BEAD,FBR07HA121NB-00
⚠ FC801	87-033-213-080		FUSE, CLAMP PFC5000
⚠ FC802	87-033-213-080		FUSE, CLAMP PFC5000
FR601	87-A00-063-060		RES,FUSE 2.2-1/2W J R-TYPE
FR602	87-A00-652-090		RES,FUSE 0.33-1W J RF 1SL12.5
FR603	87-A00-052-060		RES,FUSE 3.9-1W J R-TYPE
FR604	87-029-121-010		RES,FUSE 1.5-1W J
FR803	87-025-538-090		RES,M/O 68-3W J
HL9	84-LB3-216-010		HLDR,LED
J901	87-A60-324-110		JACK,PIN 6P Y-W-R W/SW
J902	87-A61-435-010		JACK,PIN 3P WHT YKC21-5734A
L1	87-003-147-080		COIL, 22UH
L2	87-003-152-080		COIL, 100UH
L101	87-005-444-080		COIL 100UH,K
L102	87-003-152-080		COIL, 100UH
L104	87-003-106-080		COIL,0.33UH K LAL02
L108	87-003-146-080		COIL,15UH J LAL02
L109	87-003-282-080		COIL,12UH J LAL02
L110	87-003-146-080		COIL,15UH J LAL02
L111	87-003-282-080		COIL,12UH J LAL02
L112	87-005-440-080		COIL,47UH K FLR50
L113	87-003-098-080		COIL,2.2UH K LAL02
L114	87-A50-530-010		COIL,VCO38.0MHZ
L301	87-005-444-080		COIL 100UH,K FLR50
L302	87-005-481-080		COIL,47UH J FLR50
L303	87-005-444-080		COIL 100UH,K FLR50
L801	87-A50-636-010		COIL,390UH CRCH-110
⚠ LF801	8A-JEE-610-010		FLTR,LINE ELF18D604 (4.7MH)
⚠ LF802	8A-JEE-610-010		FLTR,LINE ELF18D604 (4.7MH)
⚠ PR601	87-A90-090-080		PROTECTOR,1.5A 491SERIES 60V
⚠ PR801	87-A90-090-080		PROTECTOR,1.5A 491SERIES 60V
⚠ PR803	87-A90-094-080		PROTECTOR,4A 491SERIES 60V
⚠ PR804	87-A90-094-080		PROTECTOR,4A 491SERIES 60V
⚠ PS801	87-A91-407-010		P-COUPLER,ON3171-R
⚠ PS802	87-A91-407-010		P-COUPLER,ON3171-R
⚠ PT801	8Z-JB9-621-010		PT,SW ZJB-KE-A M
R101	87-A00-164-090		RES,M/F 12K-2W J RSF(S)
R317	87-A00-308-090		RES,M/F 47-3W J RSF(S)
R511	87-A00-653-090		RES,M/F 270-1W J RSF(S)
R515	87-A00-143-090		RES,M/F 1.0-1W J RSF(S)
R612	87-A00-225-090		RES,M/F 2.2K-5W J RSV5

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
R802	87-A00-552-010		RES,CEM 1.0-10W J MPC722
R803	87-A00-552-010		RES,CEM 1.0-10W J MPC722
R804	87-A00-543-080		RES,SD 8.2M-1W J RCR60
R807	87-A00-639-090		RES,CEM 0.15-5W K BPR
R808	87-A00-573-090		RES,CEM 0.33-5W J MPC71
R816	87-A00-170-090		RES,M/F 82K-3W J RSF(S)
R817	87-A00-223-090		RES,M/F 47K-2W J RSF(S)
R827	87-A00-673-090		RES,M/F 82K-5W J RSS5L30
R830	87-A00-102-090		RES,M/F 12-3W J
S1	87-A91-525-080		SW,TACT SKQNLA
S2	87-A91-525-080		SW,TACT SKQNLA
S3	87-A91-525-080		SW,TACT SKQNLA
S4	87-A91-525-080		SW,TACT SKQNLA
S5	87-A91-525-080		SW,TACT SKQNLA
S6	87-A91-525-080		SW,TACT SKQNLA
S501	87-A90-567-010		SW,LVR 4-1-3 EVQRAAL10
⚠ S801	87-A91-410-010		SW,AC PUSH 1-1-1 ESB92SH1B
SWF201	87-A91-515-010		FLTR,SAW TSB5388P
SWF202	87-A91-556-010		FLTR,SAW TSF6364U
⚠ T601	8A-JEA-606-010		FBT,SH NX4014 AJE-A
⚠ T602	85-JT2-653-010		PT,HDT-TV141-2
⚠ THP801	87-A91-405-010		POS-THMS,T209-B80-A10
TU101	87-A91-495-010		TU UNIT, ENV59D58G3-38.0MHZ
W106	8A-JEH-662-010		CONN ASSY,1P BLK PS
X1	87-030-300-080		VIB,XTAL 8.00MHZ
X301	87-A70-054-080		VIB,XTAL 4.43MHZ AQC-1018

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C479	87-010-247-080		CAP, ELECT 100-50V
C480	87-010-388-080		CAP ELECT 1000-25V SME
C481	87-010-388-080		CAP ELECT 1000-25V SME
C482	87-010-401-080		CAP, ELECT 1-50V
C483	87-010-247-080		CAP, ELECT 100-50V
C484	87-A11-148-080		CAP,TC U 0.1-50 Z F
C493	87-010-112-080		CAP, ELECT 100-16V
C498	87-010-402-080		CAP, ELECT 2.2-50V
CN401	87-A60-623-010		CONN,6P V 2MM JMT
CN402	87-A60-627-010		CONN,10P V 2MM JMT
CN403	87-A60-447-010		CONN,8P V TID-X
CN404	87-A60-444-010		CONN,5P V TID-X
CN408	87-A60-457-010		CONN,4P V TID-X
CNA401	8Z-JB4-660-010		CONN ASSY,5P 401-481 AUDIO
CNA408	8Z-JE5-640-010		CONN ASSY,4P SP-25
FR401	87-A00-084-090		RES,FUSE 1-1W J
FR402	87-A00-084-090		RES,FUSE 1-1W J
J403	87-A61-275-010		JACK,3.5 BLK ST 2 SW P
L651	87-A50-607-080		COIL,3.9MH J LHL 10<SHR>
R401	87-025-381-080		RES,M/F 18K-1/6W F
R402	87-025-424-080		RES,M/F 10K 1/6W F
R404	87-025-380-080		RES,M/F 15K-1/6W F
R405	87-025-381-080		RES,M/F 18K-1/6W F
R554	87-A00-070-090		RES,M/F 220-1W J
R555	87-A00-070-090		RES,M/F 220-1W J
R652	87-A00-537-090		RES,M/F 100-5W J RSV5

AUDIO C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C401	87-010-402-080		CAP, ELECT 2.2-50V
C402	87-010-260-080		CAP, ELECT 47-25V
C403	87-018-134-080		CAPACITOR,TC-U 0.01-16
C405	87-010-402-080		CAP, ELECT 2.2-50V
C406	87-010-405-080		CAP, ELECT 10-50V
C407	87-A11-148-080		CAP,TC U 0.1-50 Z F
C408	87-010-367-080		CAP,E 4.7-25 BP
C411	87-010-367-080		CAP,E 4.7-25 BP
C412	87-010-405-080		CAP, ELECT 10-50V
C413	87-A11-148-080		CAP,TC U 0.1-50 Z F
C414	87-010-405-080		CAP, ELECT 10-50V
C415	87-010-367-080		CAP,E 4.7-25 BP
C418	87-010-367-080		CAP,E 4.7-25 BP
C419	87-A11-148-080		CAP,TC U 0.1-50 Z F
C420	87-010-260-080		CAP, ELECT 47-25V
C421	87-010-260-080		CAP, ELECT 47-25V
C422	87-018-134-080		CAPACITOR,TC-U 0.01-16
C426	87-A11-148-080		CAP,TC U 0.1-50 Z F
C427	87-010-401-080		CAP, ELECT 1-50V
C428	87-018-134-080		CAPACITOR,TC-U 0.01-16
C429	87-010-263-080		CAP, ELECT 100-10V
C433	87-A11-148-080		CAP,TC U 0.1-50 Z F
C434	87-A11-148-080		CAP,TC U 0.1-50 Z F
C435	87-010-260-080		CAP, ELECT 47-25V
C436	87-018-119-080		CAP, CER 100P-50V
C437	87-018-119-080		CAP, CER 100P-50V
C438	87-010-367-080		CAP,E 4.7-25 BP
C440	87-A11-147-080		CAP,TC U 0.047-50 Z F
C442	87-A11-147-080		CAP,TC U 0.047-50 Z F
C445	87-010-367-080		CAP,E 4.7-25 BP
C446	87-010-101-080		CAP, ELECT 220-16
C447	87-A11-148-080		CAP,TC U 0.1-50 Z F
C467	87-010-367-080		CAP,E 4.7-25 BP
C470	87-010-112-080		CAP, ELECT 100-16V
C471	87-A11-148-080		CAP,TC U 0.1-50 Z F
C472	87-010-367-080		CAP,E 4.7-25 BP
C475	87-010-379-080		CAP, ELECT 22-16V
C476	87-010-400-080		CAP, ELECT 0.47-50V
C477	87-010-400-080		CAP, ELECT 0.47-50V
C478	87-010-401-080		CAP, ELECT 1-50V

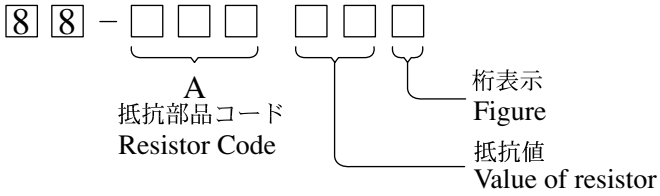
NICAM C.B

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
C701	87-010-318-080		C-CAP,S 47P-50 CH
C702	87-010-318-080		C-CAP,S 47P-50 CH
C703	87-010-145-080		C-CAP,S 1P-50 CH
C704	87-010-145-080		C-CAP,S 1P-50 CH
C705	87-010-553-080		CAP,E 47-16
C706	87-010-197-080		CAP, CHIP 0.01 DM
C707	87-010-197-080		CAP, CHIP 0.01 DM
C708	87-010-496-080		CAP,E 3.3-50 5L
C709	87-010-197-080		CAP, CHIP 0.01 DM
C710	87-010-197-080		CAP, CHIP 0.01 DM
C714	87-010-555-080		CAP,E 100-10 GAS
C715	87-010-197-080		CAP, CHIP 0.01 DM
C716	87-010-316-080		C-CAP,S 33P-50 CH
C719	87-010-498-080		CAP,E 10-16 GAS
C720	87-012-157-080		C-CAP,S 330P-50 CH
C723	87-010-498-080		CAP,E 10-16 GAS
C724	87-010-494-080		CAP ELECT GAS 1/50
C725	87-010-197-080		CAP, CHIP 0.01 DM
C726	87-010-197-080		CAP, CHIP 0.01 DM
C727	87-010-497-080		CAP,E 4.7-35 5L
C728	87-010-197-080		CAP, CHIP 0.01 DM
C729	87-010-555-080		CAP,E 100-10 GAS
C730	87-010-321-080		CHIP CAPACITOR,82P(J)
C731	87-012-140-080		CAP 470P
C732	87-010-189-080		C-CAP,S 8200P-50 B
C733	87-010-183-080		C-CAP,S 2700P-50 B
C734	87-012-142-080		CAP, S 0.33-16
C737	87-010-552-080		CAP,E 22-16 GAS
C739	87-012-157-080		C-CAP,S 330P-50 CH
C740	87-010-318-080		C-CAP,S 47P-50 CH
C741	87-012-140-080		CAP 470P
C742	87-010-189-080		C-CAP,S 8200P-50 B
C743	87-010-183-080		C-CAP,S 2700P-50 B
C744	87-012-142-080		CAP, S 0.33-16
C745	87-012-157-080		C-CAP,S 330P-50 CH
C748	87-012-154-080		C-CAP,S 150P-50 CH
CN701	87-A60-722-010		CONN,8P JL-R
CN702	87-A60-720-010		CONN,6P JL-R
L701	87-005-461-080		COIL,1UH J FLR50
L702	87-005-461-080		COIL,1UH J FLR50

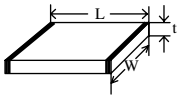
REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
L703	87-005-473-080		COIL,10UH J FLR50
L705	87-005-473-080		COIL,10UH J FLR50
L707	87-005-473-080		COIL,10UH J FLR50
L708	87-005-485-080		COIL,100UH J FLR50
X701	87-A70-199-080		VIB,XTAL 18.432MHZ
TEXT C.B			
C751	87-010-196-080		CHIP CAPACITOR,0.1-25
C752	87-010-196-080		CHIP CAPACITOR,0.1-25
C753	87-010-196-080		CHIP CAPACITOR,0.1-25
C754	87-010-197-080		CAP, CHIP 0.01 DM
C755	87-010-555-080		CAP,E 100-10 GAS
C756	87-010-498-080		CAP,E 10-16 GAS
C757	87-010-196-080		CHIP CAPACITOR,0.1-25
C758	87-010-313-080		CAP, CHIP 18P
C759	87-010-313-080		CAP, CHIP 18P
C760	87-010-495-080		CAP,E2.2-50
CN750	87-A60-722-010		CONN,8P JL-R
CN751	87-A60-719-010		CONN,5P JL-R
L751	87-005-481-080		COIL,47UH J FLR50
X751	83-JU3-667-080		VIB,XTAL 12.0M
NK C.B			
C901	87-010-405-080		CAP, ELECT 10-50V
C902	87-010-968-080		CAP,CER 680P-2K K B
C903	87-010-405-080		CAP, ELECT 10-50V
C906	87-010-400-080		CAP, ELECT 0.47-50V
C907	87-010-235-080		CAP,E 470-16 SME
C908	87-A11-110-080		CAP, TC U 820P-50 J CH
C909	87-A11-112-080		CAP, TC U 1000P-50 J CH
C910	87-A11-110-080		CAP, TC U 820P-50 J CH
C911	87-A11-106-080		CAP, TC U 560P-50 J CH
C912	87-A11-106-080		CAP, TC U 560P-50 J CH
C913	87-A11-106-080		CAP, TC U 560P-50 J CH
C914	87-A10-052-080		CAP,E 2.2-250
C915	87-010-260-080		CAP, ELECT 47-25V
C916	87-018-134-080		CAPACITOR,TC-U 0.01-16
C917	87-010-970-090		CAP,CER 4700P-2K B F
C951	87-010-381-080		CAP, E 330-16 M SME
C952	87-018-114-080		CAP,TC U 39P-50 J SL
C954	87-010-405-080		CAP, E 10-50 M 11L SME
C955	87-010-405-080		CAP, E 10-50 M 11L SME
C956	87-010-405-080		CAP, E 10-50 M 11L SME
C958	87-018-117-080		CAP,TC U 68P-50 J SL
C959	87-A10-050-010		CAP,CER 4700P-500 K
C960	87-010-221-080		CAP,E 470-10 M SME
C961	87-010-965-080		CAP,E 33-160 M L SME
C962	87-A12-010-080		CAP,M/P 0.047-250 J ECQE2
C963	87-A10-283-080		CAP,M 1000P-50 J
C964	87-A10-283-080		CAP,M 1000P-50 J
C965	87-010-963-080		CAP,E 2.2-160 M 11L SME
C966	87-A12-014-080		CAP,M/P 0.1-250 J ECQE2
C967	87-A10-303-080		CAP,M 0.047-50 J
C968	87-010-221-080		CAP,E 470-10 M SME
C981	87-018-120-080		CAP,TC U 120P-50 KB
C982	87-018-134-080		CAP,TC U 0.01-16 NY
C983	87-010-405-080		CAP,E 10-50 M 11L SME
CN901	87-049-590-010		CONN,5P 8283 V WHT
CN902	87-A60-444-010		CONN,5P V TID-X
CN903	87-A61-126-080		MALE, 1P TP42097
CN904	87-A61-060-080		CONN,1P V RED TP00706
CN906	87-A60-456-010		CONN,3P V TID-X
CN951	87-A60-620-010		CONN,3P V 2MM JMT
CN952	87-A60-455-010		CONN,2P V TID-X
CNA952	8A-JE7-620-010		CONN ASSY,2P VM-NK
CON903	8A-JEF-607-010		CONN ASSY,1P CRT-GND
DL981	87-A91-598-010		DELAY LINE,350NS EQFK5-MT
L901	87-005-614-080		COIL 100UH LAV35 J
L902	87-005-614-080		COIL 100UH LAV35 J
L903	87-005-614-080		COIL 100UH LAV35 J
L904	87-005-611-080		COIL,56UH J LAV35
L951	87-005-482-080		COIL,56UH J FLR50
L952	87-005-481-080		COIL,47UH J FLR50
L981	87-003-146-080		COIL,15UH J LAL02
R901	87-A00-242-090		RES,M/F 8.2K-3W J RS
R902	87-A00-242-090		RES,M/F 8.2K-3W J RS
R903	87-A00-242-090		RES,M/F 8.2K-3W J RS
R968	87-022-382-090		RES,M/F 120-2W J
R969	87-A00-638-080		RES,M/F 47-1/2W J SPR
R970	87-A00-634-080		RES,M/F 2.7-1/4W J SPR
R971	87-A00-636-080		RES,M/F 560-1/4W J SPR
R973	87-A00-637-080		RES,M/F 1K-1/4W J SPR
R974	87-022-556-090		RES,M/O 180-3W J
R976	87-A00-636-080		RES,M/F 560-1/4W J SPR
R977	87-A00-634-080		RES,M/F 2.7-1/4W J SPR
R978	87-A00-635-080		RES,M/F 47-1/4W J SPR
SO901	8A-JE7-670-010		SOCKET,CRT 11P HPS1521
PIN C.B			
C651	87-A12-320-090		CAP,M/P 0.013-1.6K H ECWH(VB)
C652	87-A11-999-090		CAP,M/P 0.012-800 H ECWH(V)
C653	87-012-392-090		CAP,CER 1200P-2K K BNDE
C654	87-A10-833-090		CAP,CER 1000P-2K K R
C655	87-A11-278-090		CAP,M/P 0.47-250 J ECWF(SR)
C658	87-016-217-080		CAP,E 4.7-160
C659	87-010-976-080		CAP,CER 1000P-500 B
C660	87-018-131-080		CAP, CER 1000P-50V
C661	87-010-405-080		CAP, ELECT 10-50V
C662	87-010-405-080		CAP, ELECT 10-50V
C663	87-010-395-080		CAP,E 330-35 SME
C665	87-A11-124-080		CAP,TC U 2200P-50 K B
CN651	87-A61-126-080		MALE, 1P TP42097
CN652	87-A60-003-010		CONN,2P V TBL-P BOSS
CN653	87-A60-444-010		CONN,5P V TID-X
L652	8Z-JE5-621-010		COIL,HLC ZJE-5
L653	87-005-757-010		COIL,3.3MH
R653	87-A00-629-090		RES,M/F 5.6-1W J RSF(S)
SFR651	87-024-434-080		SFR,22K RH063EC
SFR652	87-024-429-080		SFR,1K RH063EC
SFR653	87-024-436-080		SFR 47K H RH063MC

Oチップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち
Chip Resistor Part Coding



チップ抵抗
Chip resistor

容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm) 外形／Form	L	W	t	抵抗コード Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128

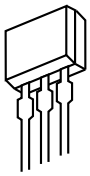
TRANSISTOR ILLUSTRATION

E C B

2SC3467D/E
2SA1015GR

B E C

2SC3779D/E



E C B

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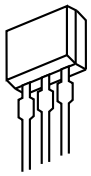

S D G

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E C B

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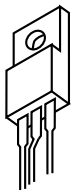
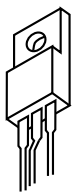
2SA933SRS
2SA1175FE



B C E

2SD2580



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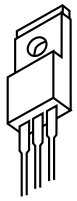
SE120N



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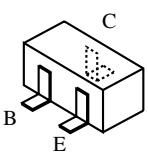

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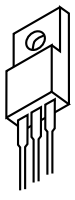
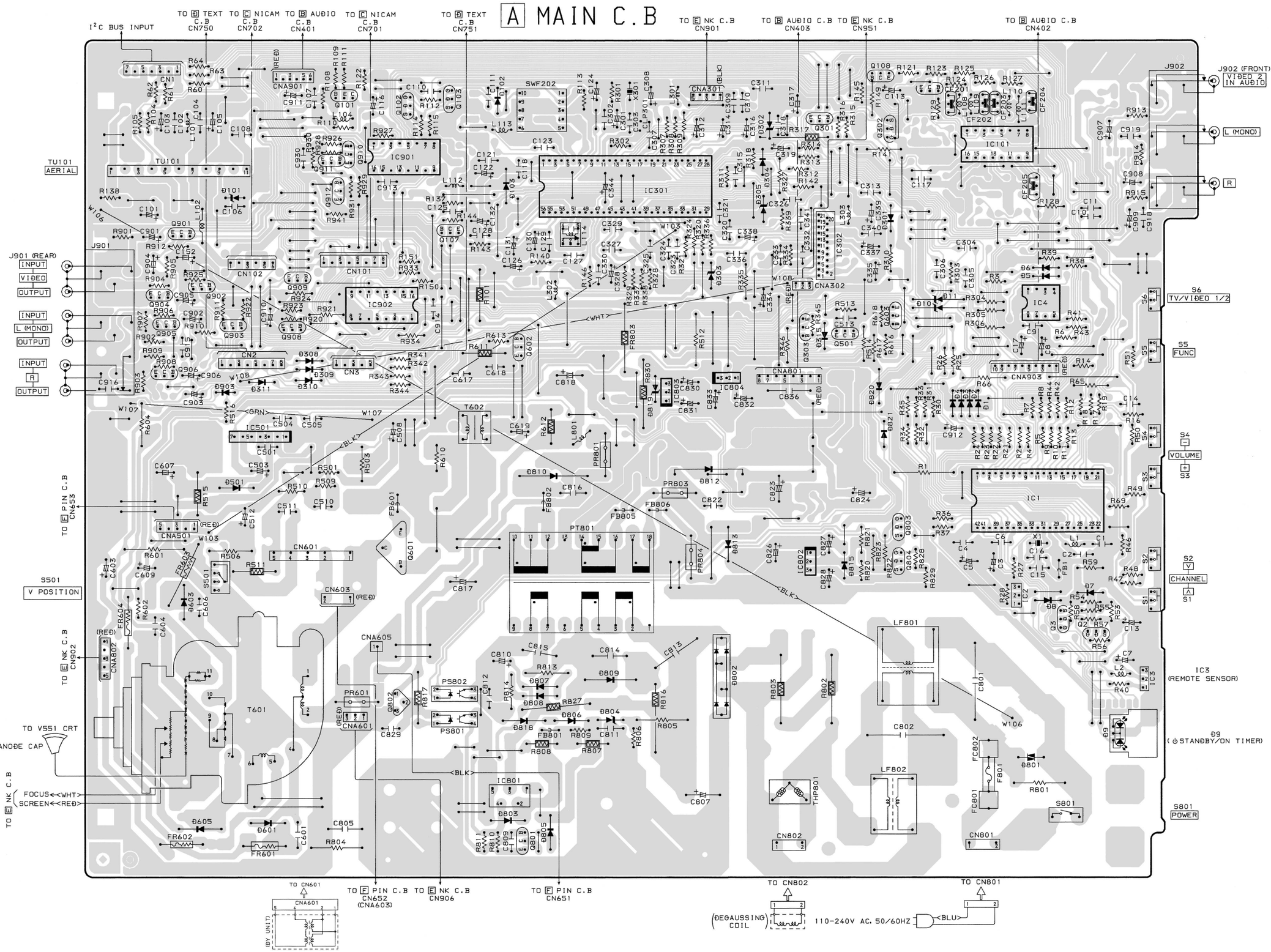


B C E

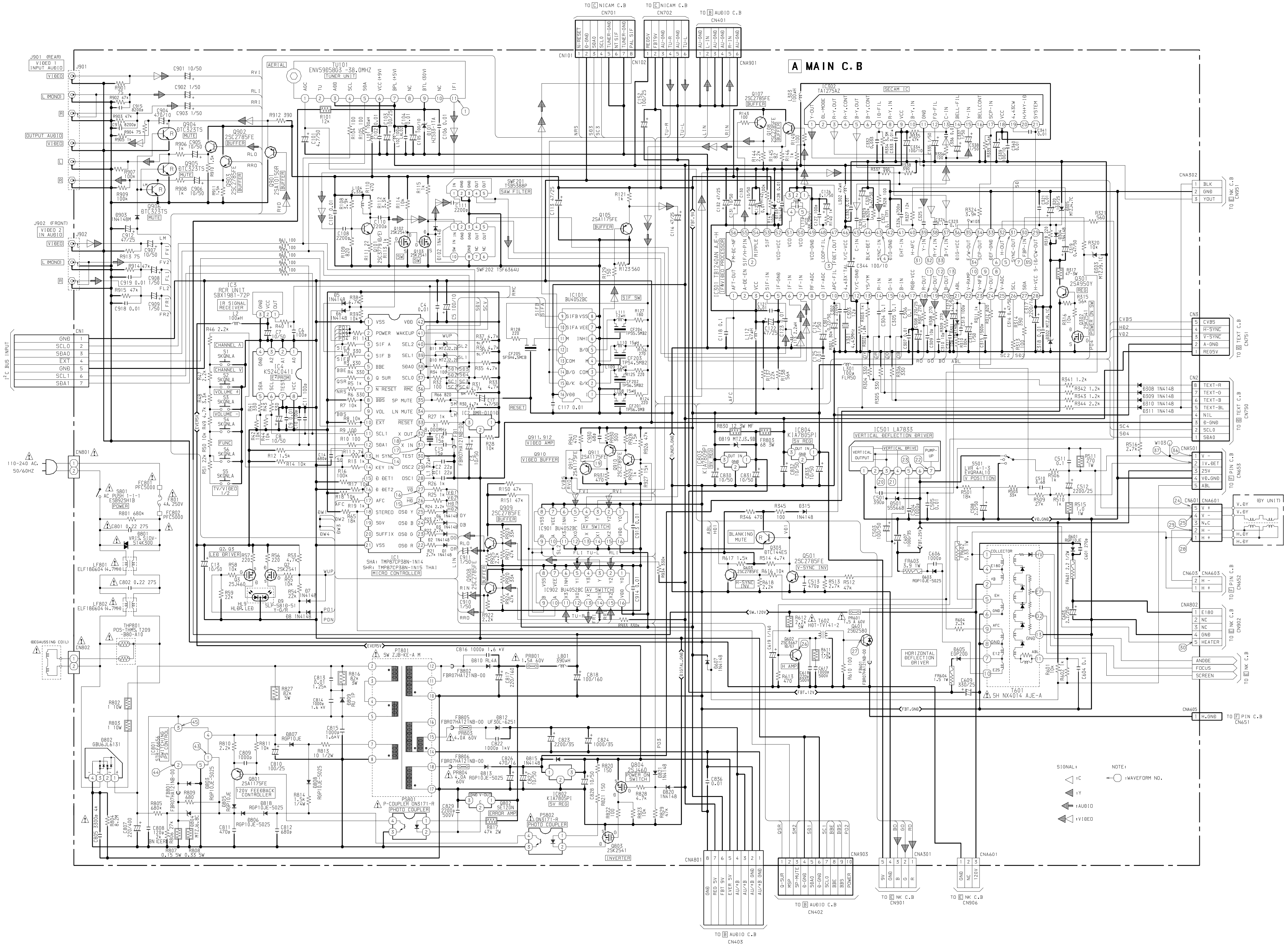
2SC5147D

E C B

2SD774

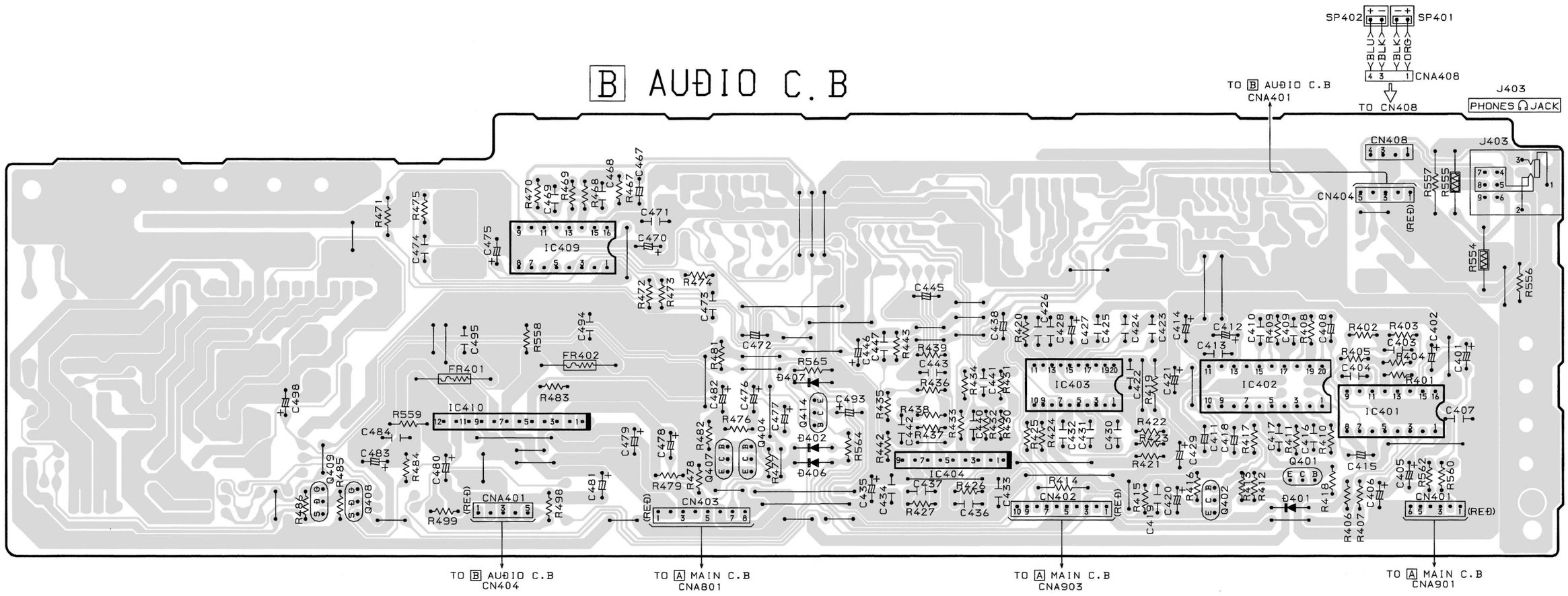

A MAIN C.B
I²C BUS INPUT
TO D TEXT C.B CN750
TO C NICAM C.B CN702
TO B AUDIO C.B CN401
TO C NICAM C.B CN701
TO D TEXT C.B CN751
TO E NK C.B CN901
TO B AUDIO C.B CN403
TO E NK C.B CN951
TO B AUDIO C.B CN402
TU101 AERIAL
J901 (REAR)
INPUT VIDEO OUTPUT
INPUT L (MONO) OUTPUT
INPUT R OUTPUT
J901
J902
J902 (FRONT) VIDEO 2 IN AUDIO
L (MONO)
R
S6 TV/VIDEO 1/2
S5 FUNC
S4 VOLUME
S3
S2 CHANNEL
S1
S501 V POSITION
S801 POWER
IC1
IC3 (REMOTE SENSOR)
IC101
IC301
IC302
IC4
IC804
IC901
IC902
IC801
IC802
TO V551 CRT ANODE CAP
TO E NK C.B FOCUS<WHT> SCREEN<RED>
TO E PIN C.B CN653
TO E NK C.B CN902
TO CN601 (BY UNIT)
TO E PIN C.B CN652 (CNA603)
TO E NK C.B CN906
TO F PIN C.B CN651
TO CN802 (DEGAUSSING COIL)
TO CN801 110-240V AC. 50/60HZ
D9 (STANDBY/ON TIMER)
T601
T602
LF801
LF802
THP801
PT801
PS802
PS801
PR601
PR801
PR803
PR804
CNA901
CNA301
CNA302
CNA801
CNA903
CNA501
CNA601
CNA605
CNA802
CN101
CN102
CN2
CN3
CN601
CN603
SWF202
FR601
FR602
FR603
FR604
W103
W104
W106
W107
W108
<WHT>
<GRN>
<BLK>
<RED>
<BLU>

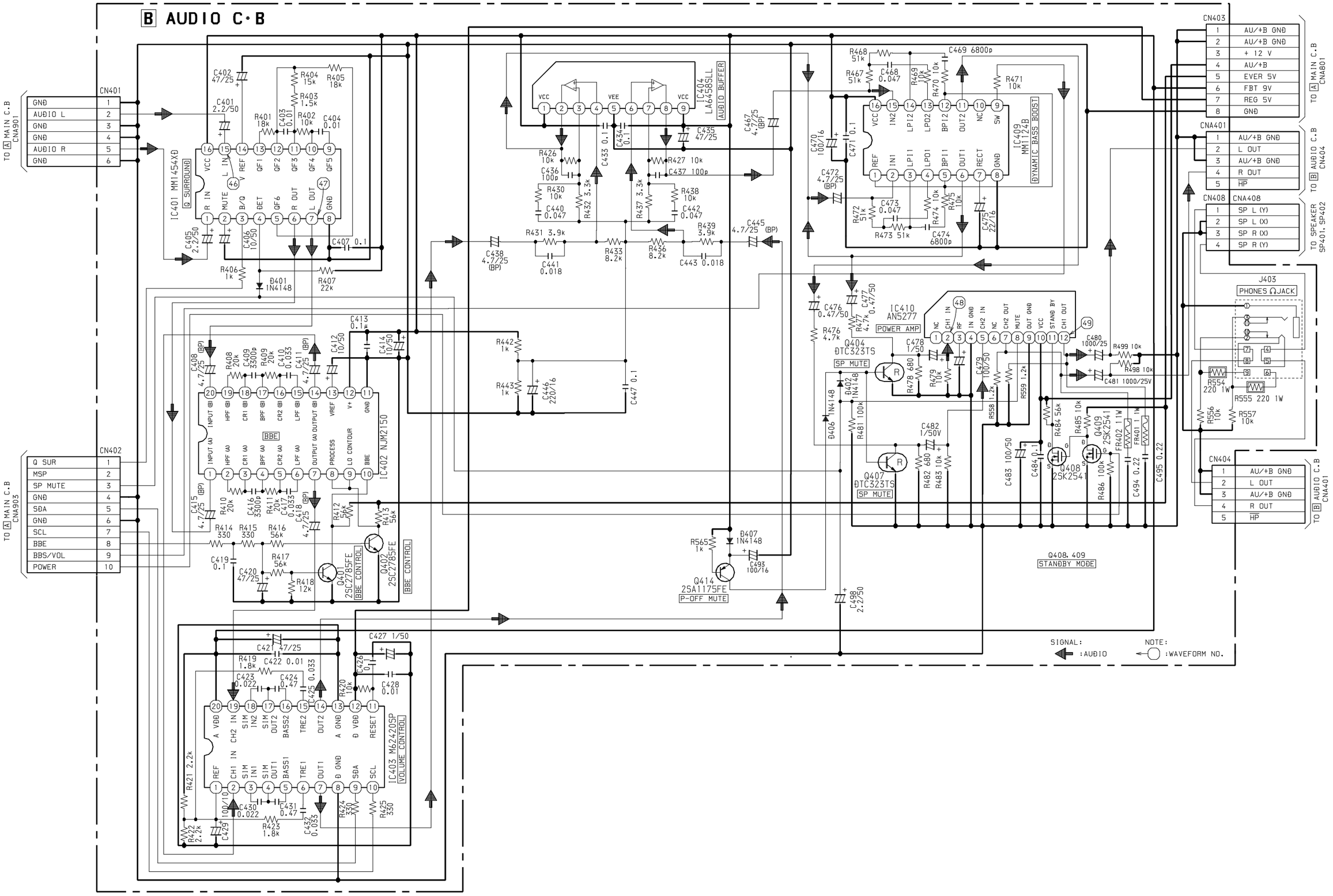
SCHEMATIC DIAGRAM – 1 (MAIN)


A MAIN C.B
TO C NICAM C.B CN701
TO C NICAM C.B CN702
TO B AUDIO C.B CN401
J901 (REAR) VIDEO 1 INPUT AUDIO
J902 (FRONT) VIDEO 2 IN AUDIO
OUTPUT AUDIO
TU101 ENV59D58G3 -38.0MHZ TUNER UNIT
AERIAL
SWF201 TSB5388P SAW FILTER
SWF202 TSF6364U
IC3 RCR UNIT SBX1981-72P IR SIGNAL RECEIVER
IC4 KS24C041I E2PROM
IC1 SHA: TMP87CP38N-1N14 SHR: TMP87CP38N-1N15 THAI MICRO CONTROLLER
IC2 BMR-0101D
IC101 BU4052BC SIF SW
IC901 BU4052BC AV SWITCH
IC902 BU4052BC AV SWITCH
IC301 TB1240AN AJE-H IF&VIDEO PROCESSOR
IC302 TA1275AZ SECAM IC
IC501 LA7833 VERTICAL DEFLECTION DRIVER
IC801 STR-F6656 SWITCHING PS CONTROL
IC802 KIA7805PI 5V REG
IC803 KIA7809PI 9V REG
IC804 KIA7805PI 5V REG
Q2, Q3 LED DRIVER
Q301 2SA950Y REG
Q302 2SK2541 POWER ON SW
Q801 2SA1175FE 120V FEEDBACK CONTROLLER
Q802 SE120N ERROR AMP
Q803 2SK2541 INVERTER
Q804 2SJ460 POWER ON SWITCH
PT801 SW ZJB-KE-A M
PS801 P-COUPLER ON3171-R PHOTO COUPLER
PS802 ON3171-R PHOTO COUPLER
T601 SH NX4014 AJE-A
HORIZONTAL DEFLECTION DRIVER
S501 LVR 4-1-3 EVQRAAL10 V POSITION
110-240 AC. 50/60HZ
S801 AC PUSH 1-1-1 ESB92SH1B POWER
CNA302 TO E NK C.B CN951
CN3 TO D TEXT C.B CN751
CN2 TO D TEXT C.B CN750
CNA501 TO F PIN C.B CN653
CN601 CNA601 (DY UNIT)
CN603 CNA603 TO F PIN C.B CN652
CNA802 TO E NK C.B CN902
ANODE FOCUS SCREEN TO E NK C.B
CNA605 H.GND TO F PIN C.B CN651
CNA801 TO B AUDIO C.B CN403
CNA903 TO B AUDIO C.B CN402
CNA301 TO E NK C.B CN901
CNA601 TO E NK C.B CN906
I2C BUS INPUT
(DEGAUSSING COIL)
SIGNAL: :C :Y :AUDIO :VIDEO
NOTE: :WAVEFORM NO.

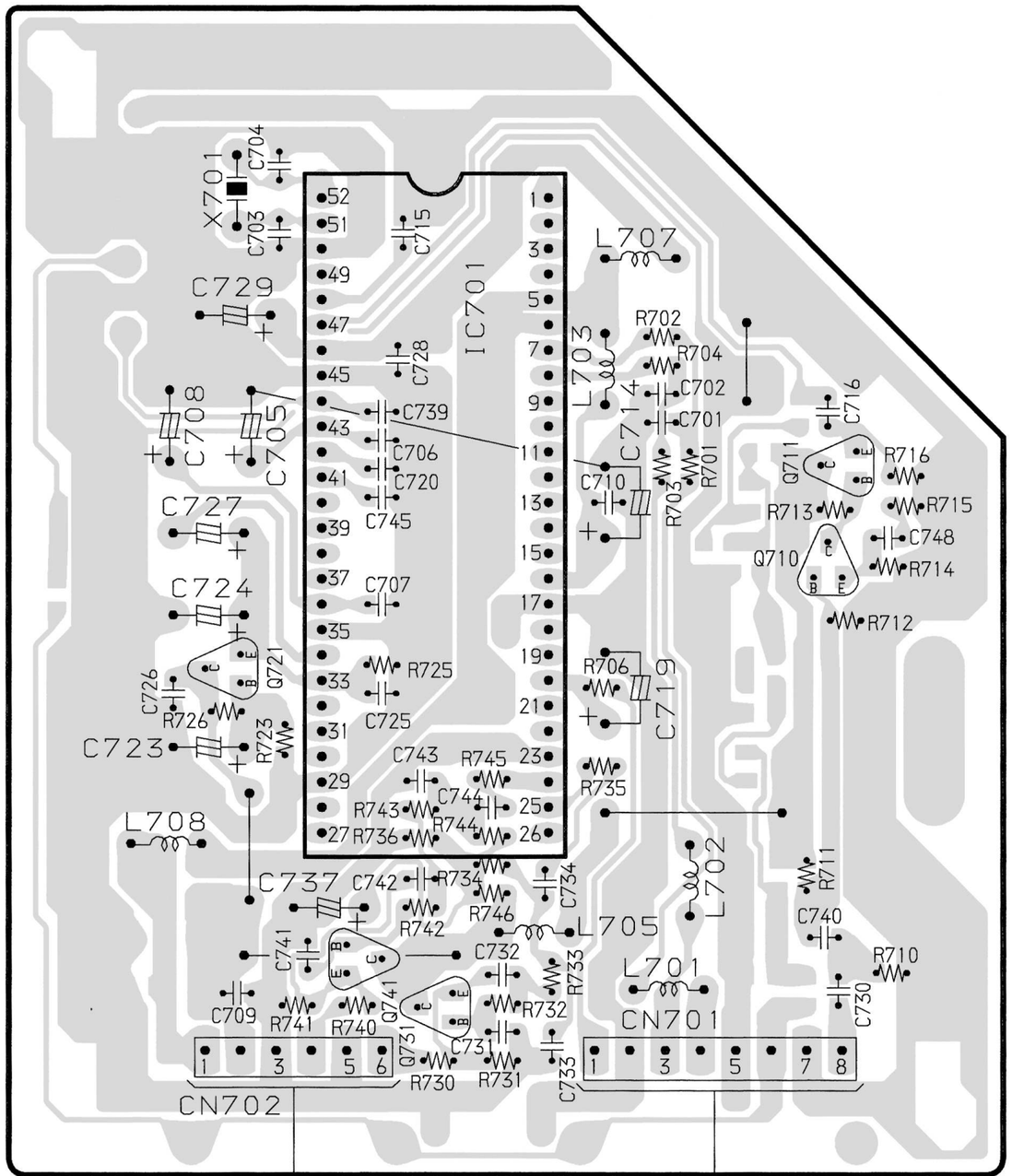
32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

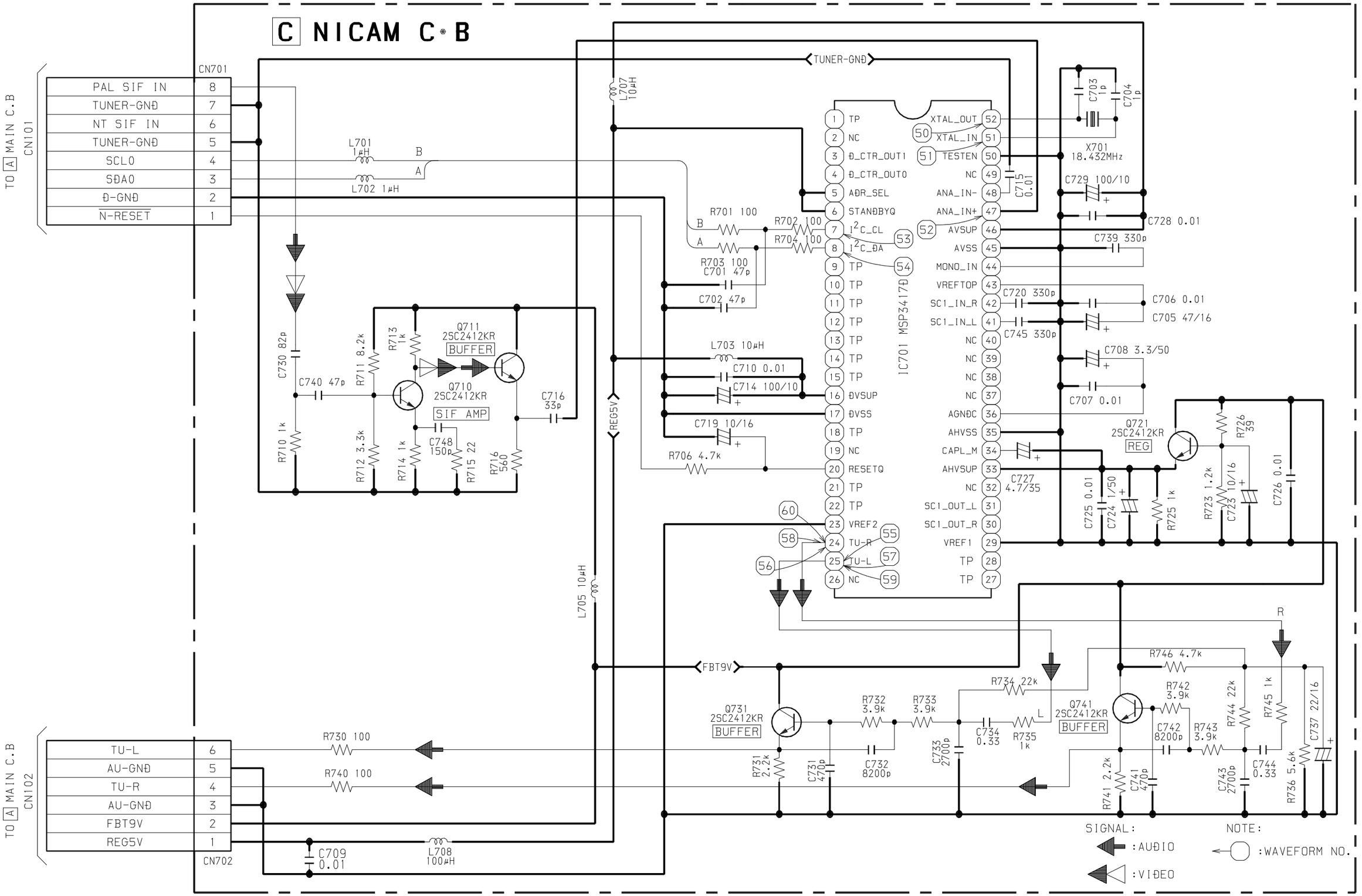
A B C D E F G H I J K L M N O P Q R S T U



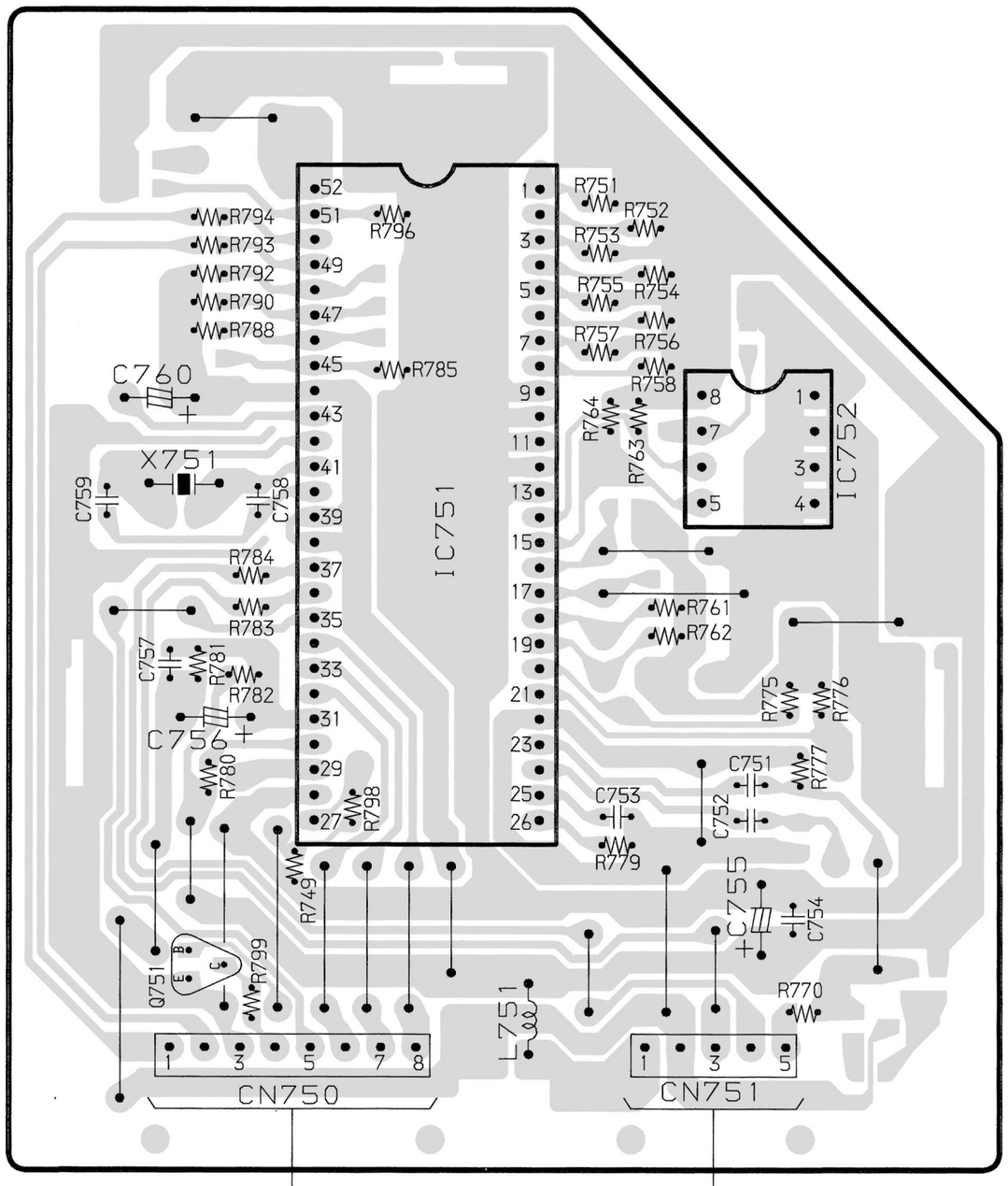

B AUDIO C·B
CN401
GND 1
AUDIO L 2
GND 3
GND 4
AUDIO R 5
GND 6
TO A MAIN C.B CNA901
IC401 MM1454XD
Q SURROUND
IC404 LA6458SLL
AUDIO BUFFER
IC409 MM1124B
DYNAMIC BASS BOOST
IC410 AN5277
POWER AMP
Q404 DTC323TS
SP MUTE
Q407 DTC323TS
SP MUTE
Q408. 409
STANDBY MODE
IC402 NJM2150
BBE
BBE CONTROL
Q401 2SC2785FE
BBE CONTROL
Q402 2SC2785FE
BBE CONTROL
IC403 M62420SP
VOLUME CONTROL
Q414 2SA1175FE
P-OFF MUTE
D401 1N4148
D402 1N4148
D406 1N4148
D407 1N4148
Q408 2SK2541
Q409 2SK2541
J403
PHONES JACK
CN402
Q SUR 1
MSP 2
SP MUTE 3
GND 4
SDA 5
GND 6
SCL 7
BBE 8
BBS/VOL 9
POWER 10
TO A MAIN C.B CNA903
CN403
1 AU/+B GND
2 AU/+B GND
3 + 12 V
4 AU/+B
5 EVER 5V
6 FBT 9V
7 REG 5V
8 GND
TO A MAIN C.B CNA801
CNA401
1 AU/+B GND
2 L OUT
3 AU/+B GND
4 R OUT
5 HP
TO B AUDIO C.B CN404
CN408 CNA408
1 SP L (Y)
2 SP L (X)
3 SP R (X)
4 SP R (Y)
TO SPEAKER SP401. SP402
CN404
1 AU/+B GND
2 L OUT
3 AU/+B GND
4 R OUT
5 HP
TO B AUDIO C.B CN401
SIGNAL: :AUDIO
NOTE: :WAVEFORM NO.

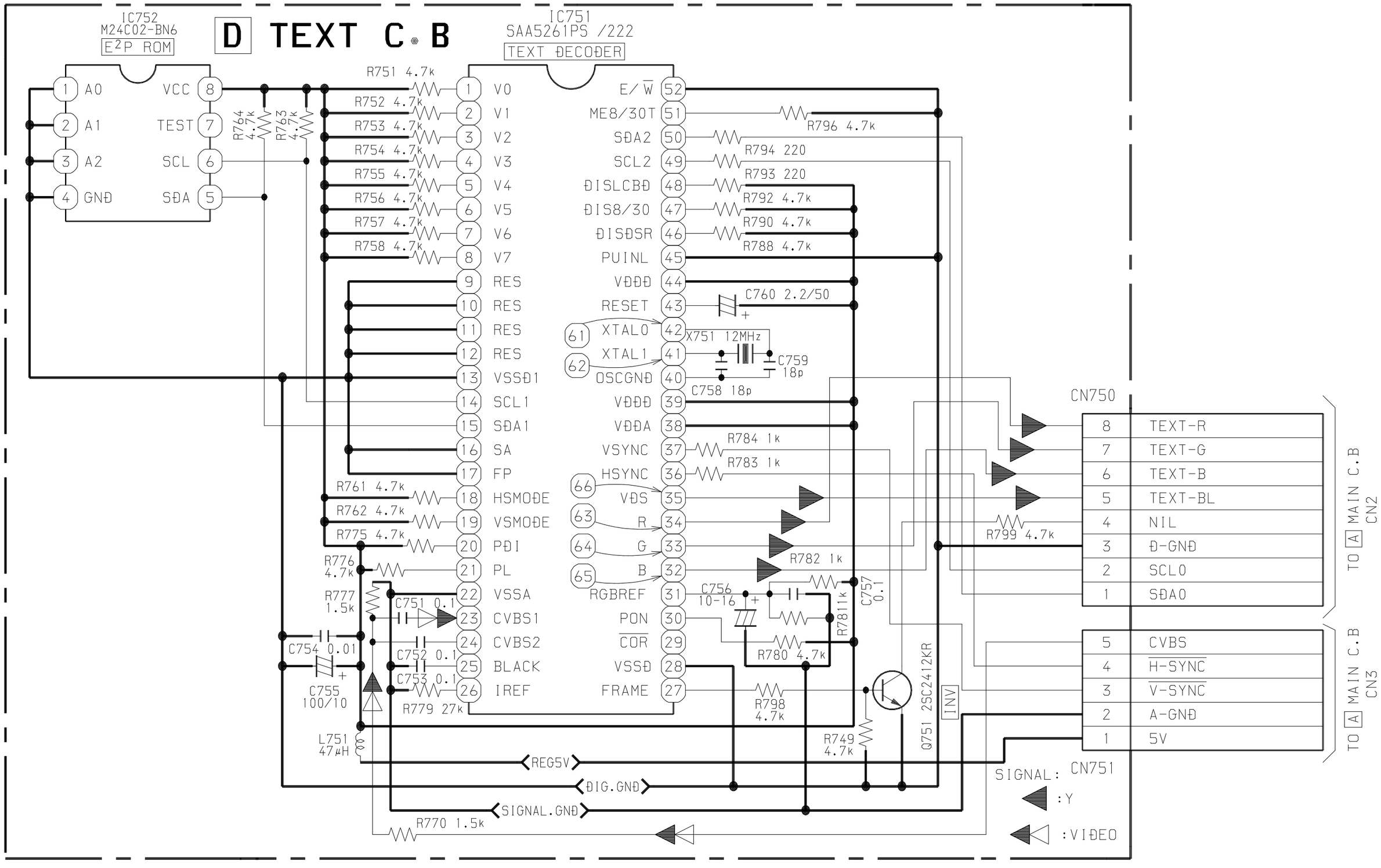
C NICAM C.B


X701
C704
C703
C715
C729
IC701
C728
C708
C705
C739
C706
C720
C745
C727
C707
C724
C721
Q721
C726
R726
R725
C725
C723
R723
C743
R745
C744
R743
R744
R736
L708
C737
C742
R734
R746
C734
R742
L705
C741
C732
R733
Q741
R741
R740
C709
Q731
R732
C731
R730
R731
C733
CN702
L707
R702
R704
L703
C702
C714
C701
C716
C710
R703
R701
Q711
R716
R713
R715
C748
Q710
R714
R712
R706
C719
R735
L702
R711
C740
L701
R710
C730
CN701
TO A MAIN C.B
CN102
TO A MAIN C.B
CN101

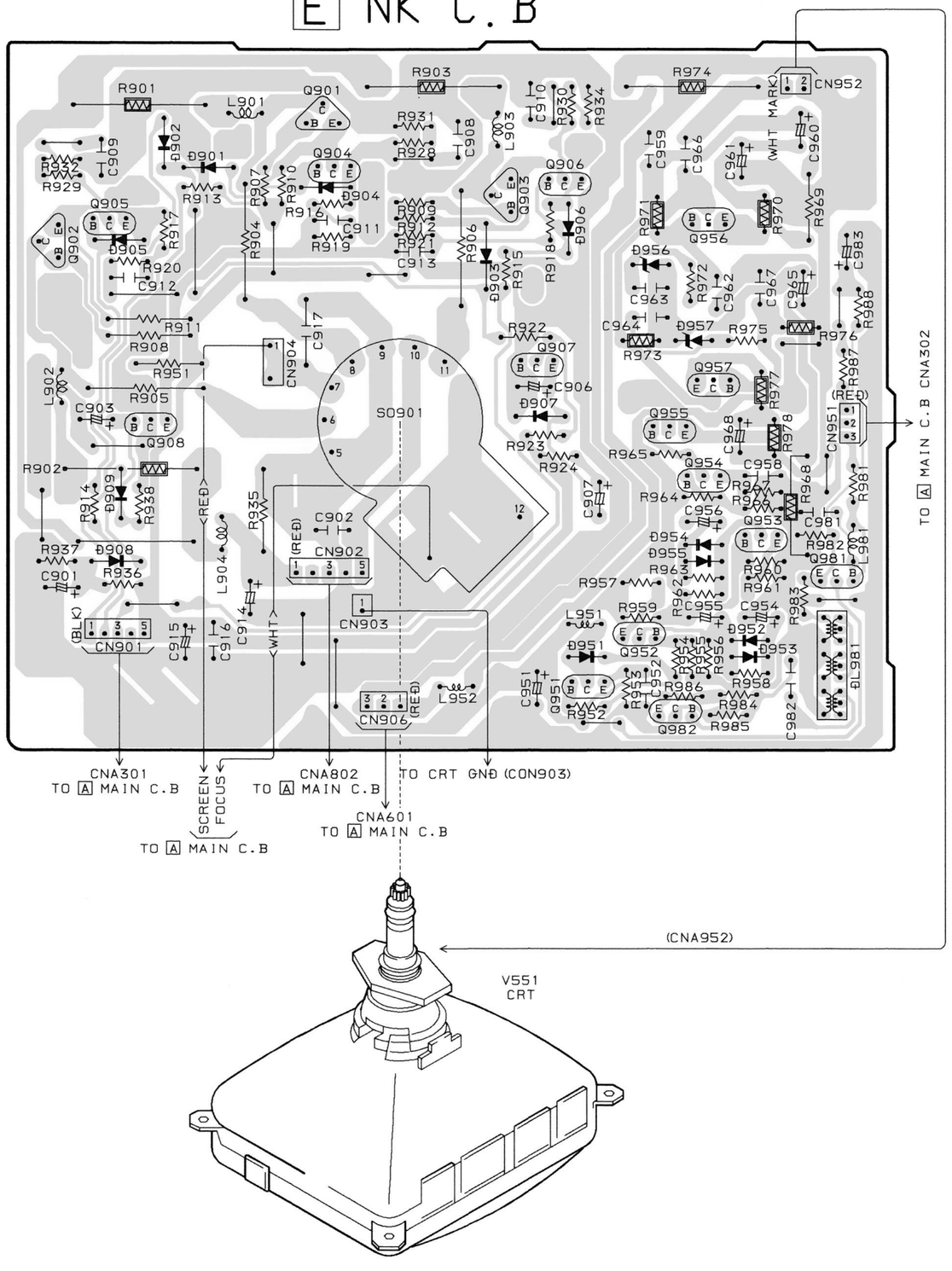

C NICAM C.B
TO A MAIN C.B
CN101
CN701
PAL SIF IN 8
TUNER-GNÐ 7
NT SIF IN 6
TUNER-GNÐ 5
SCL0 4
SÐA0 3
Ð-GNÐ 2
N-RESET 1
TUNER-GNÐ
L707 10µH
L701 1µH
L702 1µH
R701 100
R702 100
R704 100
R703 100
C701 47p
C702 47p
C703 1p
C704 1p
X701 18.432MHz
C715 0.01
C729 100/10
C728 0.01
C739 330p
C720 330p
C706 0.01
C705 47/16
C745 330p
C708 3.3/50
C707 0.01
IC701 MSP3417ÐG
1 TP
2 NC
3 Ð_CTR_OUT1
4 Ð_CTR_OUT0
5 AÐR_SEL
6 STANÐBYQ
7 I2C_CL
8 I2C_ÐA
9 TP
10 TP
11 TP
12 TP
13 TP
14 TP
15 TP
16 ÐVSUP
17 ÐVSS
18 TP
19 NC
20 RESETQ
21 TP
22 TP
23 VREF2
24 TU-R
25 TU-L
26 NC
XTAL_OUT 52
XTAL_IN 51
TESTEN 50
NC 49
ANA_IN- 48
ANA_IN+ 47
AVSUP 46
AVSS 45
MONO_IN 44
VREFTOP 43
SC1_IN_R 42
SC1_IN_L 41
NC 40
NC 39
NC 38
NC 37
AGNÐC 36
AHVSS 35
CAPL_M 34
AHVSUP 33
NC 32
SC1_OUT_L 31
SC1_OUT_R 30
VREF1 29
TP 28
TP 27
C719 10/16
R706 4.7k
C727 4.7/35
C725 0.01
C724 1/50
R725 1k
Q721 2SC2412KR REG
R726 39
R723 1.2k
C723 10/16
C726 0.01
Q711 2SC2412KR BUFFER
Q710 2SC2412KR SIF AMP
C730 82p
C740 47p
R711 8.2k
R713 1k
R710 1k
R712 3.3k
R714 1k
C748 150p
R715 22
R716 560
C716 33p
REG5V
L705 10µH
L703 10µH
C710 0.01
C714 100/10
FBT9V
R
R746 4.7k
R734 22k
Q731 2SC2412KR BUFFER
R732 3.9k
R733 3.9k
C734 0.33
R735 1k
Q741 2SC2412KR BUFFER
R742 3.9k
R743 3.9k
R744 22k
R745 1k
C737 22/16
C742 8200p
C744 0.33
R736 5.6k
R731 2.2k
C731 470p
C732 8200p
C733 2700p
R741 2.2k
C741 470p
C743 2700p
R730 100
R740 100
C709 0.01
L708 100µH
TO A MAIN C.B
CN102
CN702
TU-L 6
AU-GNÐ 5
TU-R 4
AU-GNÐ 3
FBT9V 2
REG5V 1
SIGNAL:
:AUÐIO
:VIÐEO
NOTE:
:WAVEFORM NO.

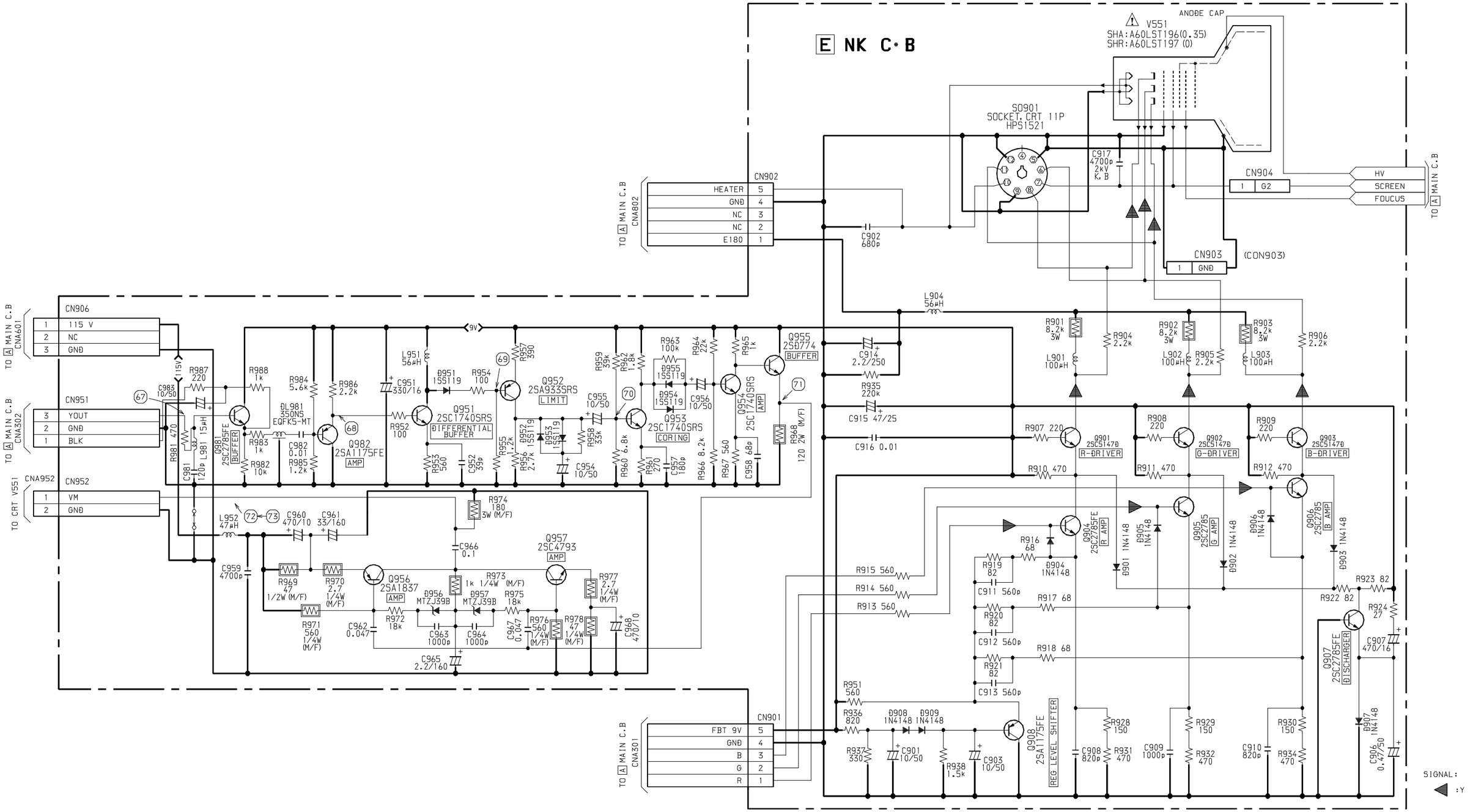
TEXT C.B


R794
R793
R792
R790
R788
R796
R785
C760
X751
C759
C758
R784
R783
C757
R781
R782
C756
R780
R798
R749
Q751
R799
IC751
52
51
49
47
45
43
41
39
37
35
33
31
29
27
1
3
5
7
9
11
13
15
17
19
21
23
25
26
R751
R752
R753
R755
R754
R757
R756
R758
R764
R763
IC752
8
7
5
1
3
4
R761
R762
R775
R776
C751
R777
C753
C752
R779
C755
C754
R770
L751
CN750
CN751
TO A MAIN C.B
CN2
TO A MAIN C.B
CN3

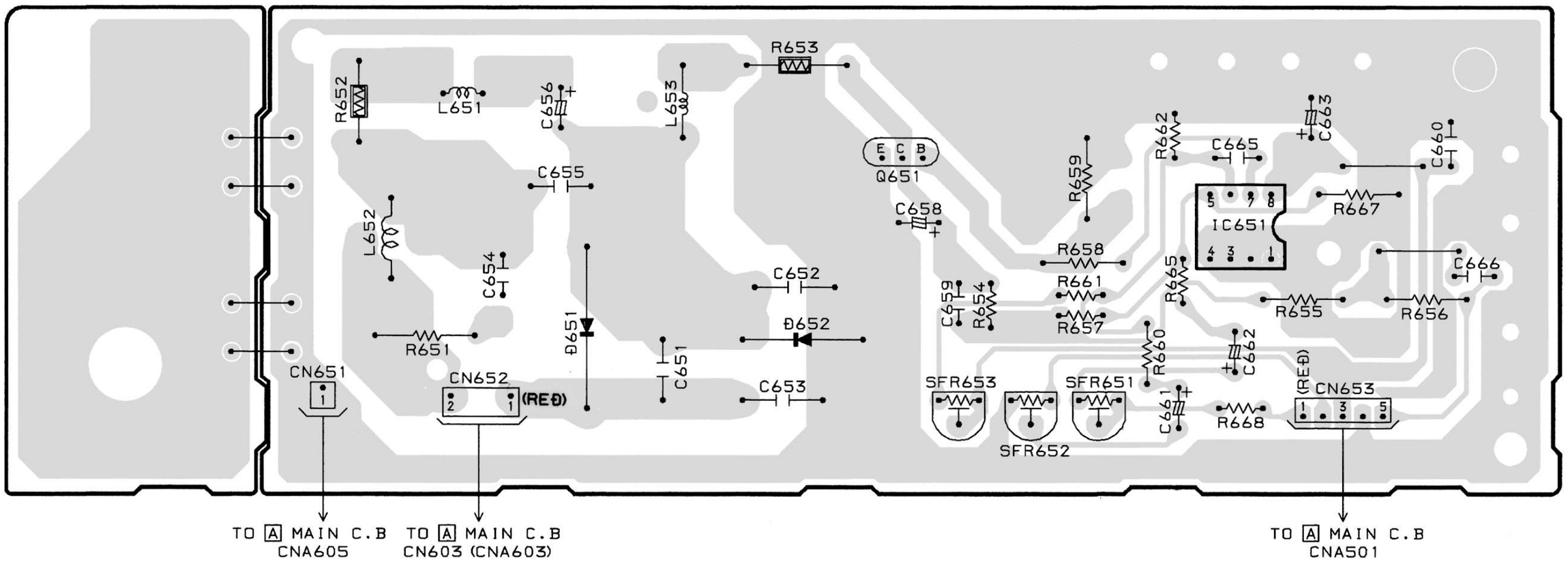

D TEXT C.B
IC752
M24C02-BN6
E2P ROM
IC751
SAA5261PS /222
TEXT DECODER
A0
A1
A2
GND
VCC
TEST
SCL
SDA
R764 4.7k
R763 4.7k
R751 4.7k
R752 4.7k
R753 4.7k
R754 4.7k
R755 4.7k
R756 4.7k
R757 4.7k
R758 4.7k
V0
V1
V2
V3
V4
V5
V6
V7
RES
RES
RES
VSSD1
SCL1
SDA1
SA
FP
HSMODE
VSMODE
PDI
PL
VSSA
CVBS1
CVBS2
BLACK
IREF
E/W
ME8/30T
SDA2
SCL2
DISLCBD
DIS8/30
DISDSR
PUINL
VDDD
RESET
XTALO
XTAL1
OSCGND
VDDD
VDDA
VSYNC
HSYNC
VDS
R
G
B
RGBREF
PON
COR
VSSD
FRAME
R796 4.7k
R794 220
R793 220
R792 4.7k
R790 4.7k
R788 4.7k
C760 2.2/50
X751 12MHz
C759 18p
C758 18p
R784 1k
R783 1k
R782 1k
C756 10-16
C757 0.1
R7811k
R780 4.7k
R798 4.7k
R749 4.7k
Q751 2SC2412KR
INV
R761 4.7k
R762 4.7k
R775 4.7k
R776 4.7k
R777 1.5k
C751 0.1
C754 0.01
C752 0.1
C753 0.1
C755 100/10
R779 27k
L751 47µH
R770 1.5k
REG5V
DIG.GND
SIGNAL.GND
CN750
8 TEXT-R
7 TEXT-G
6 TEXT-B
5 TEXT-BL
4 NIL
3 D-GND
2 SCL0
1 SDA0
R799 4.7k
TO A MAIN C.B CN2
5 CVBS
4 H-SYNC
3 V-SYNC
2 A-GND
1 5V
TO A MAIN C.B CN3
SIGNAL: CN751
:Y
:VIDEO

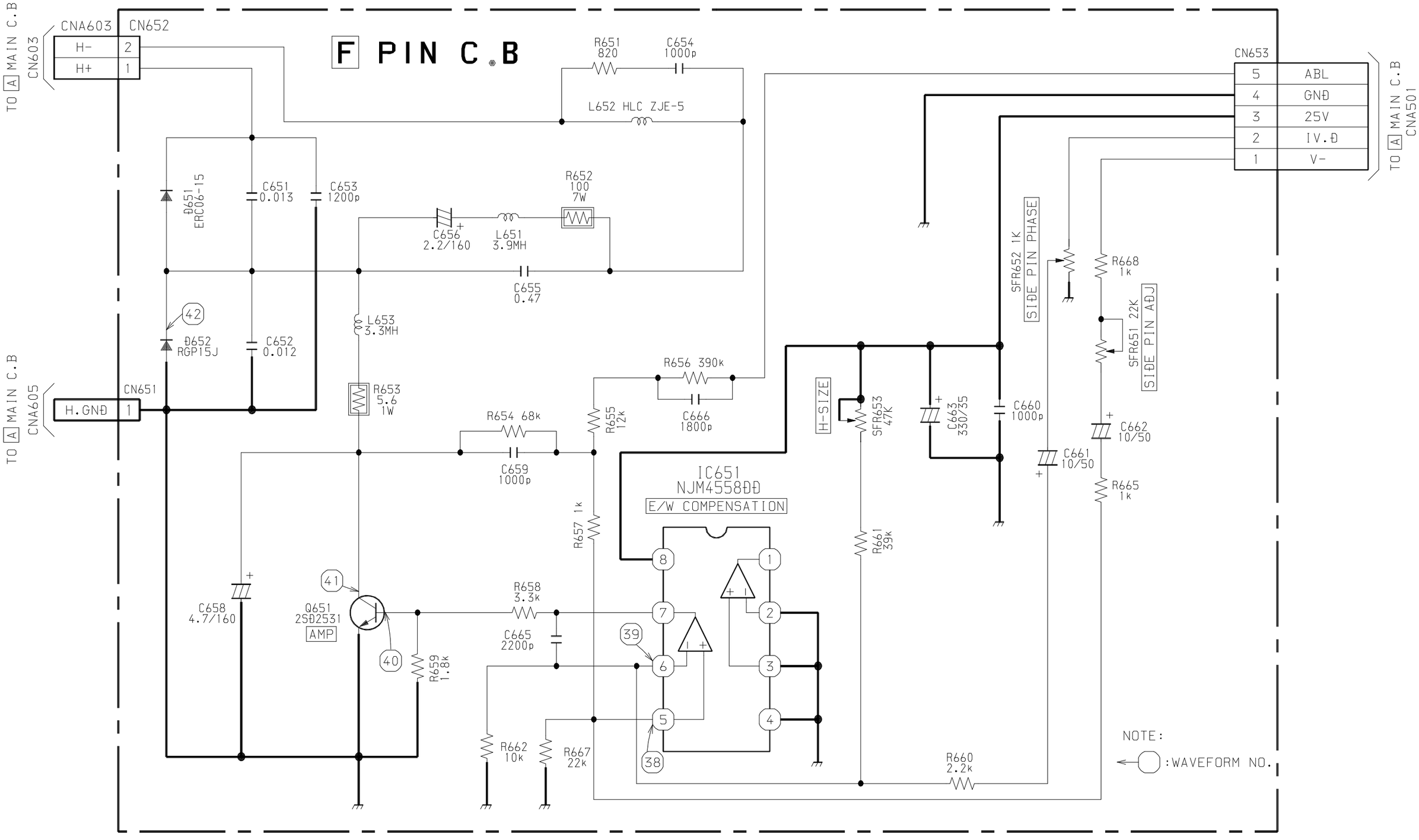
E NK C.B


R903
R974
CN952
(WHT MARK)
R901
Q901
L901
R931
C910
R930
R934
C909
D902
D901
Q904
C908
L903
R928
C959
C966
C961
C960
R929
R913
R907
R910
D904
R916
C911
R919
R909
R921
C913
Q903
Q906
D906
R906
R915
R918
R971
Q956
R970
R969
Q905
Q902
D905
R917
R920
C912
D903
D956
C963
R972
C962
C967
C965
C983
R988
C964
R973
D957
R975
R976
R911
R908
R951
C917
CN904
R922
Q907
C906
D907
R923
R924
Q957
R977
R978
Q955
C968
R965
Q954
C958
R964
R966
R968
C956
Q953
C981
R982
D954
D955
R963
Q981
L981
R957
R960
R961
C955
C954
R983
L951
R959
Q952
D952
D953
D951
R954
R955
R956
R958
R986
R984
R985
Q982
C982
D981
R952
R953
C952
Q951
C951
R987
CN951
R981
L902
R905
C903
Q908
R902
R914
D909
R938
R935
C902
CN902
R937
D908
R936
C901
L904
C914
C915
C916
CN901
CN903
CN906
L952
SO901
C907
(RED)
(BLK)
(WHT)
TO A MAIN C.B CNA302
CNA301
TO A MAIN C.B
SCREEN
FOCUS
TO A MAIN C.B
CNA802
TO A MAIN C.B
CNA601
TO A MAIN C.B
TO CRT GND (CON903)
(CNA952)
V551
CRT


E NK C·B
ANODE CAP
V551
SHA:A60LST196(0.35)
SHR:A60LST197 (0)
SO901
SOCKET,CRT 11P
HPS1521
C917
4700p
2kV
K,B
CN904
1 G2
HV
SCREEN
FOUCUS
TO A MAIN C.B
CN903
1 GND
(CON903)
CN902
HEATER 5
GND 4
NC 3
NC 2
E180 1
TO A MAIN C.B CNA802
C902
680p
L904
56µH
CN906
1 115 V
2 NC
3 GND
TO A MAIN C.B CNA601
CN951
3 YOUT
2 GND
1 BLK
TO A MAIN C.B CNA302
CNA952
CN952
1 VM
2 GND
TO CRT V551
9V
115V
R987 220
C985 10/50
R988 1k
R984 5.6k
R986 2.2k
L951 56µH
C951 330/16
D951 1SS119
R954 100
R957 390
Q952 2SA933SRS LIMIT
R959 39k
R962 1.8k
R963 100k
D955 1SS119
R944 22k
R965 1k
Q955 2SD774 BUFFER
C914 2.2/250
R935 220k
C915 47/25
C916 0.01
R981 470
C981 120p
L981 15µH
Q981 2SC2785FE BUFFER
ĐL981 350NS EQFK5-MT
R983 1k
C982 0.01
R985 1.2k
R982 10k
Q982 2SA1175FE AMP
R952 100
R953 560
C952 39p
Q951 2SC1740SRS DIFFERENTIAL BUFFER
R955 1.2k
R956 2.7k
D952 1SS119
D953 1SS119
C955 10/50
R958 33k
C954 10/50
Q953 2SC1740SRS CORING
R960 6.8k
R961 270
C957 180p
R966 8.2k
R967 560
C958 68p
D954 1SS119
C956 10/50
Q954 2SC1740SRS AMP
R968 120 2W (M/F)
R974 180 3W (M/F)
C966 0.1
L952 47µH
C960 470/10
C961 33/160
C959 4700p
R969 47 1/2W (M/F)
R970 2.7 1/4W (M/F)
R971 560 1/4W (M/F)
Q956 2SA1837 AMP
R972 18k
C962 0.047
D956 MTZJ39B
D957 MTZJ39B
R973 1k 1/4W (M/F)
R975 18k
C963 1000p
C964 1000p
C965 2.2/160
C967 0.047
R976 560 1/4W (M/F)
Q957 2SC4793 AMP
R978 47 1/4W (M/F)
R977 2.7 1/4W (M/F)
C968 470/10
R901 8.2k 3W
R902 8.2k 3W
R903 8.2k 3W
R904 2.2k
R905 2.2k
R906 2.2k
L901 100µH
L902 100µH
L903 100µH
R907 220
R908 220
R909 220
Q901 2SC5147Đ R-DRIVER
Q902 2SC5147Đ G-DRIVER
Q903 2SC5147Đ B-DRIVER
R910 470
R911 470
R912 470
Q904 2SC2785FE R AMP
Q905 2SC2785 G AMP
Q906 2SC2785 B AMP
D901 1N4148
D902 1N4148
D903 1N4148
D904 1N4148
D905 1N4148
D906 1N4148
R916 68
R915 560
R914 560
R913 560
R919 82
R920 82
R921 82
C911 560p
C912 560p
C913 560p
R917 68
R918 68
R923 82
R922 82
R924 27
C907 470/16
Q907 2SC2785FE DISCHARGER
D907 1N4148
C906 0.47/50
R951 560
R936 820
D908 1N4148
D909 1N4148
R937 330
C901 10/50
R938 1.5k
C903 10/50
Q908 2SA1175FE REG LEVEL SHIFTER
C908 820p
R931 470
R928 150
C909 1000p
R932 470
R929 150
C910 820p
R934 470
R930 150
CN901
FBT 9V 5
GND 4
B 3
G 2
R 1
TO A MAIN C.B CNA301
SIGNAL:
:Y

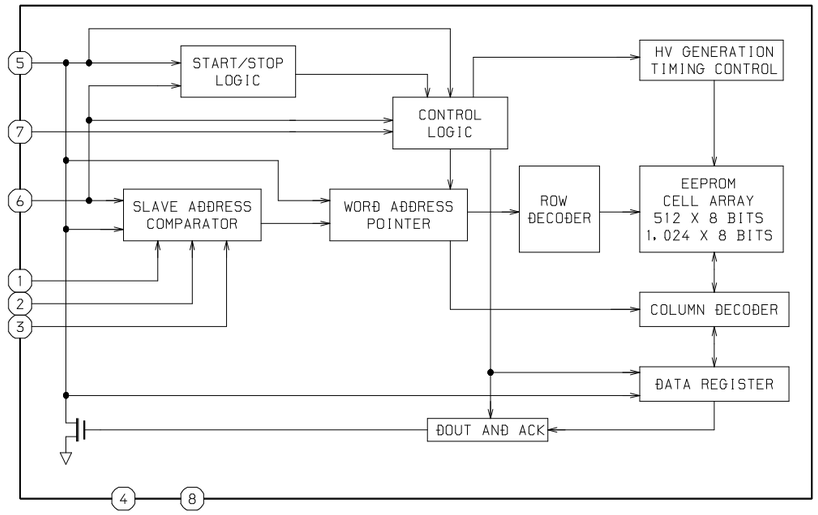
F PIN C.B


R652
L651
C656
L653
R653
C655
L652
C658
Q651
E C B
R659
R662
C665
C663
C660
IC651
R667
R658
C654
C652
R661
R665
C666
C659
R654
R655
R656
R657
R651
Đ651
Đ652
C651
C653
R660
C662
SFR653
SFR651
SFR652
C661
R668
CN651
CN652
(REĐ)
(REĐ)
CN653
TO A MAIN C.B
CNA605
TO A MAIN C.B
CN603 (CNA603)
TO A MAIN C.B
CNA501

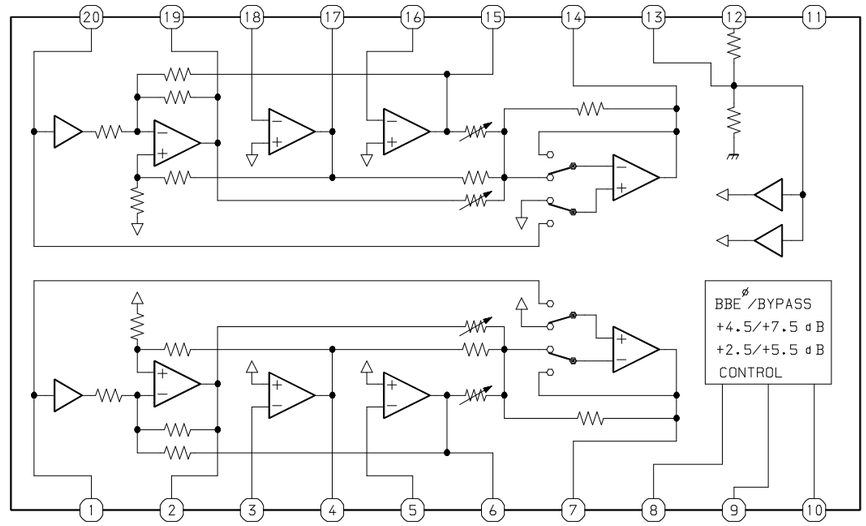

F PIN C.B
TO A MAIN C.B
CN603
CNA603
CN652
H- 2
H+ 1
R651 820
C654 1000p
L652 HLC ZJE-5
CN653
5 ABL
4 GNĐ
3 25V
2 IV.Đ
1 V-
TO A MAIN C.B
CNA501
Đ651 ERC06-15
C651 0.013
C653 1200p
R652 100 7W
C656 2.2/160
L651 3.9MH
C655 0.47
42
Đ652 RGP15J
C652 0.012
L653 3.3MH
R653 5.6 1W
TO A MAIN C.B
CNA605
CN651
H.GNĐ 1
R656 390k
C666 1800p
R654 68k
C659 1000p
R655 12k
H-SIZE
SFR653 47K
C663 330/35
C660 1000p
SFR652 1K
SIĐE PIN PHASE
R668 1k
SFR651 22K
SIĐE PIN AĐJ
C662 10/50
C661 10/50
R665 1k
IC651
NJM4558ĐĐ
E/W COMPENSATION
R657 1k
R661 39k
41
C658 4.7/160
Q651 2SĐ2531
AMP
40
R658 3.3k
C665 2200p
R659 1.8k
39
38
R662 10k
R667 22k
R660 2.2k
NOTE:
:WAVEFORM NO.

IC BLOCK DIAGRAM

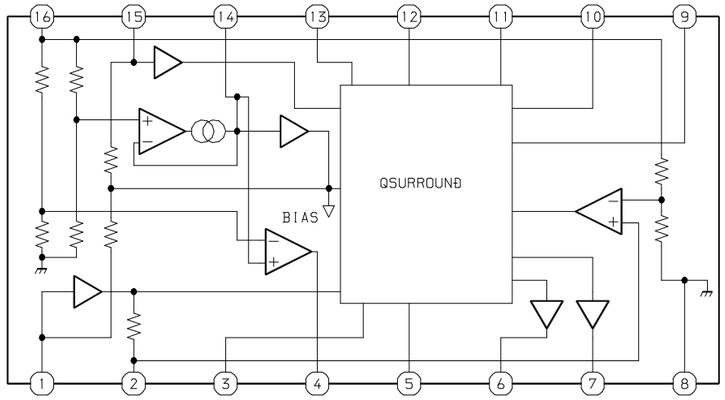
IC, KS24C041I



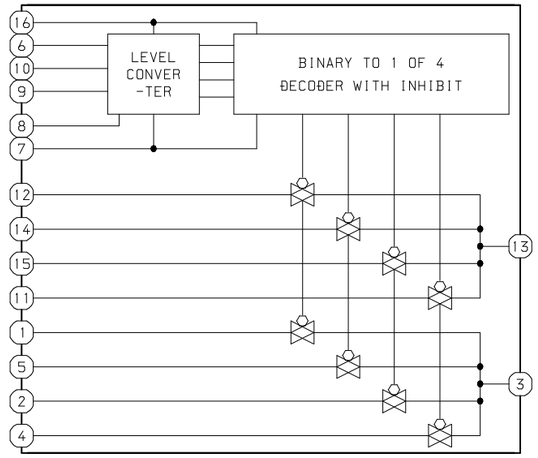
IC, NJM2150



IC, MM1454XD



IC, BU4052BC

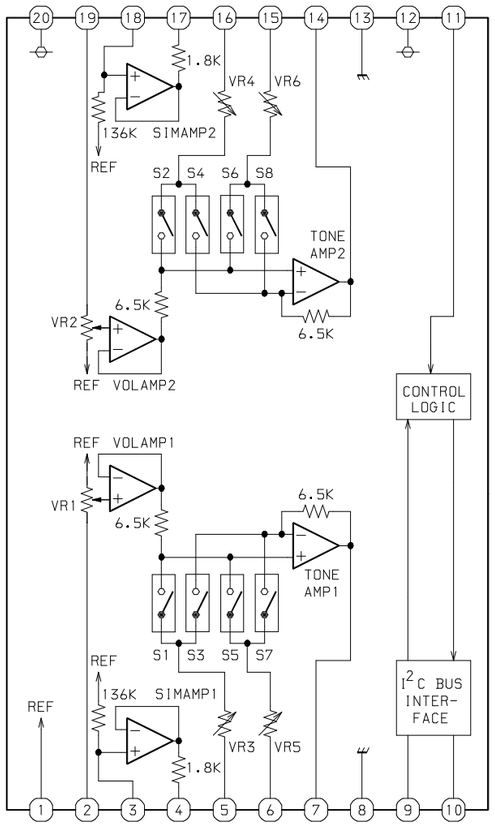


TRUTH TABLE

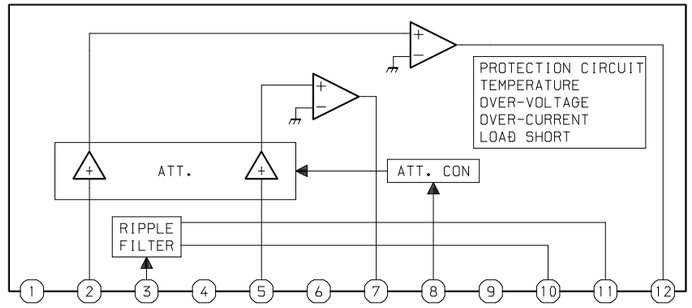
INHIBIT	A	B	ON SWITCH
L	L	L	X0 Y0
L	H	L	X1 Y1
L	L	H	X2 Y2
L	H	H	X3 Y3
H	X	X	NONE

X : DON'T CARE

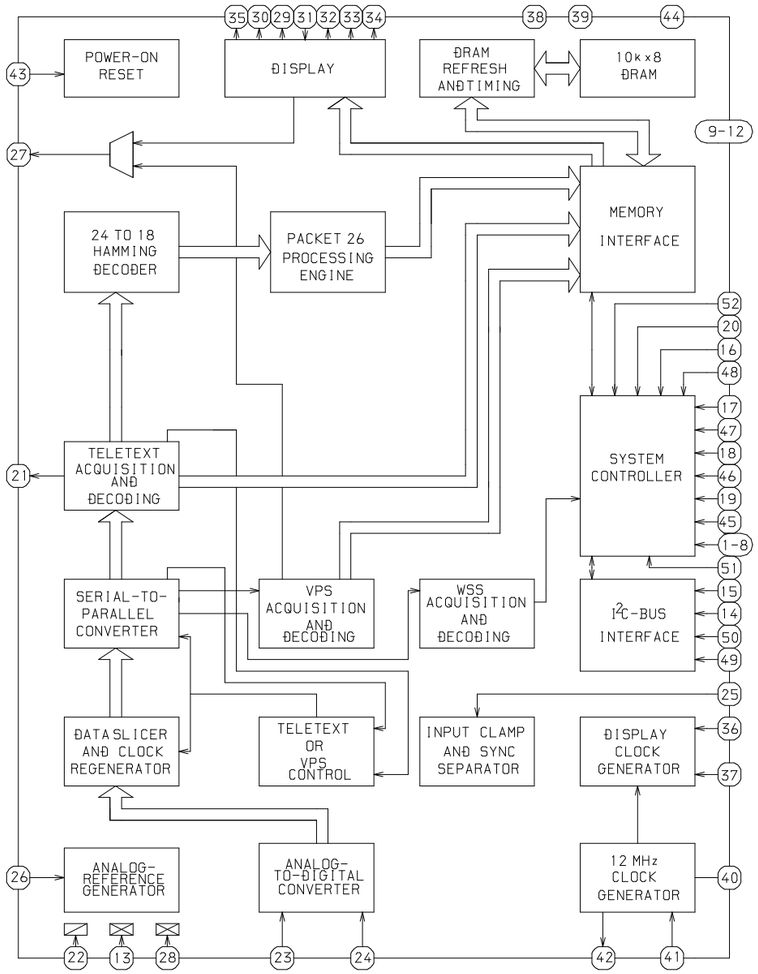
IC, M62420SP



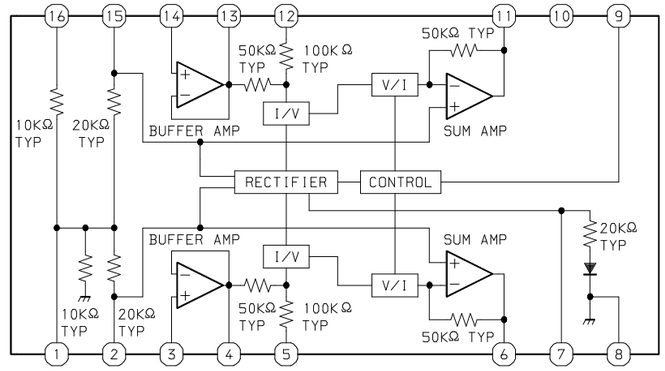
IC, AN5277



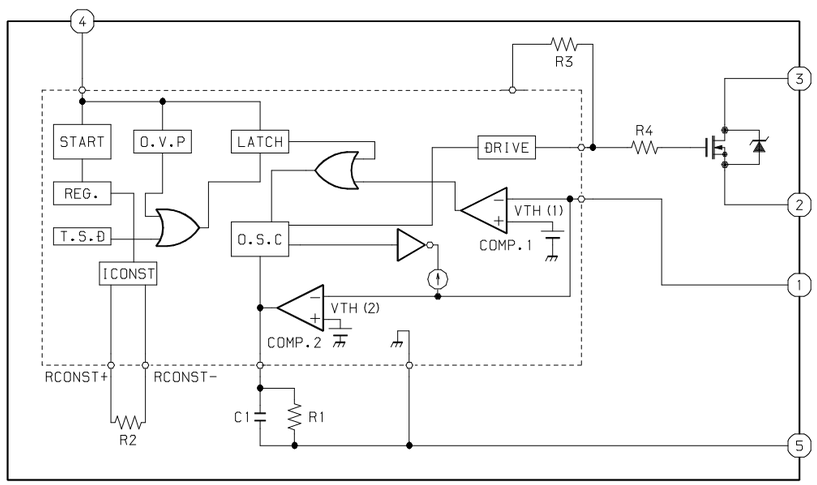
IC, SAA5261PS/222



IC, MM1124B



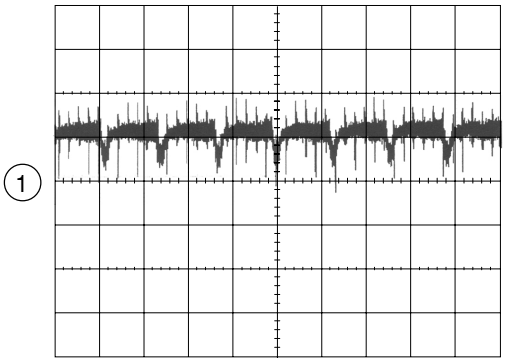
IC, STR-F6656



WAVEFORM

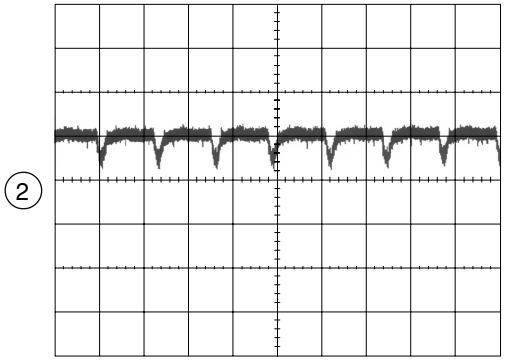
1. MAIN C.B (VIDEO SECTION)

① TU101 PIN11: IF1



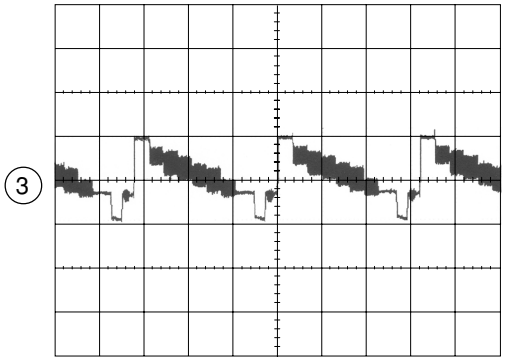
50 μs/div
200 mV/div

② IC301 PIN55: SIF/H-PIN



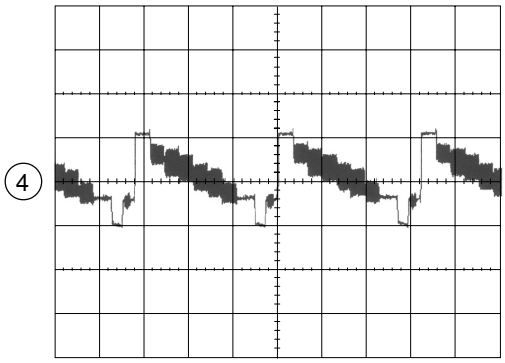
50 μs/div
200 mV/div

③ IC301 PIN47: IFDET-OUT



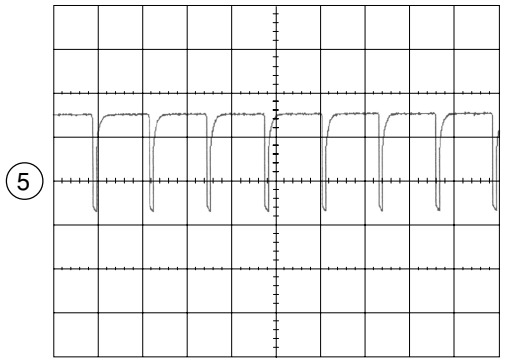
20 μs/div
1 V/div

④ IC301 PIN43: SYNC-IN



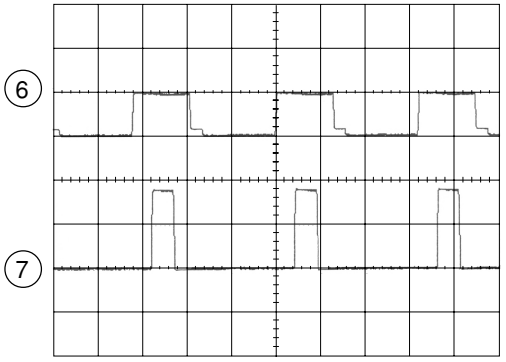
20 μs/div
1 V/diV

⑤ IC301 PIN 31: SYNC OUT



50 μs/div
2 V/div

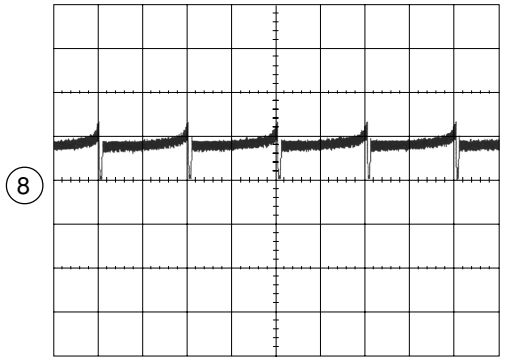
⑥ IC301 PIN32: H-OUT ⑦ IC301 PIN30: FBP-IN



20 μs/div
5 V/div

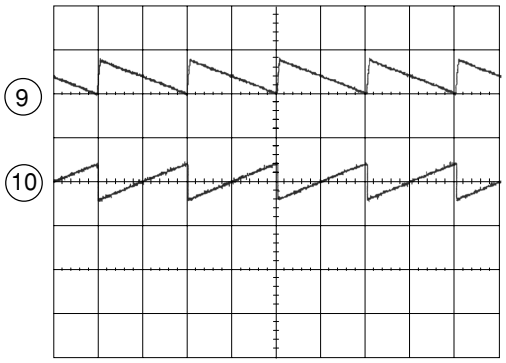
20 μs/div
5 V/div

⑧ IC301 PIN24: V-OUT



10 ms/div
1 V/div

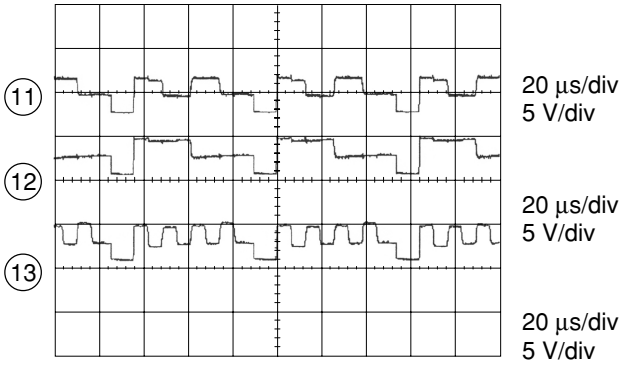
⑨ IC301 PIN20: B-OUT ⑩ IC301 PIN22: V-RAMP



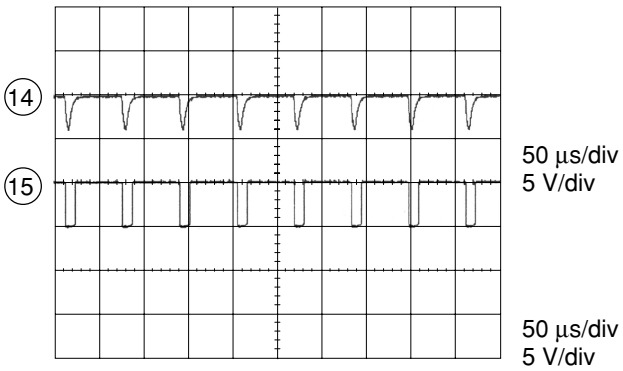
10 ms/div
2 V/div

10 ms/div
2 V/div

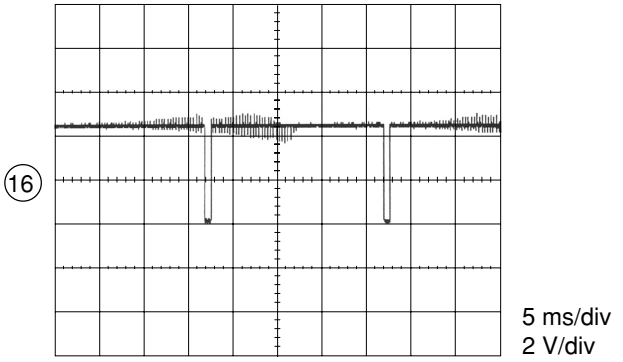
⑪ IC301 PIN18: R OUT ⑫ IC301 PIN19: G OUT
⑬ IC301 PIN20: B OUT



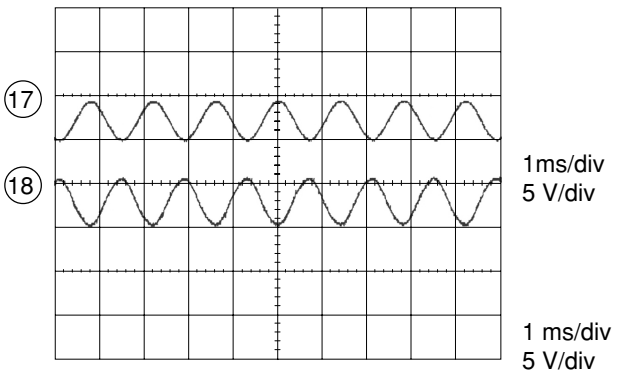
⑭ IC1 PIN13: HSYNC ⑮ IC1 PIN26: $\overline{HD}$



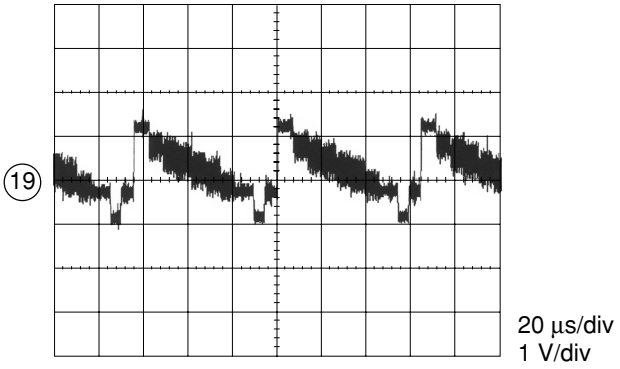
⑯ IC1 PIN27: $\overline{VD}$



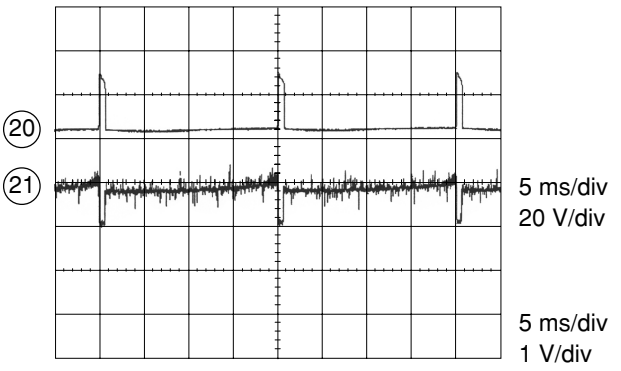
⑰ IC1 PIN31: XIN ⑱ IC1 PIN32: XOUT



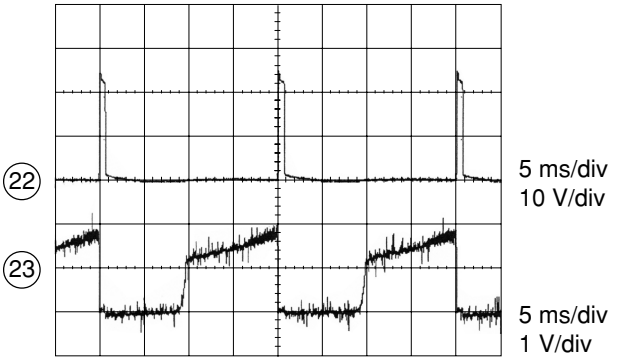
⑲ Q912 E: CVBS



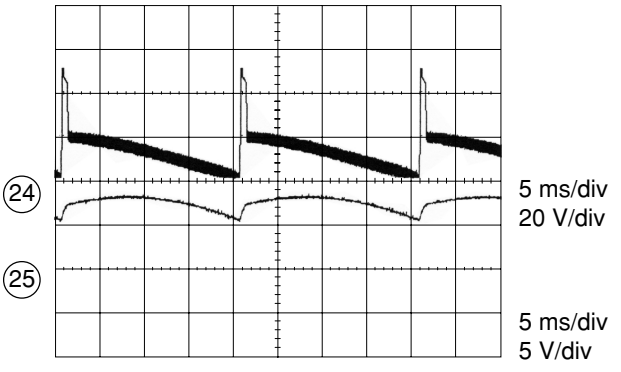
⑳ IC501 PIN3 ㉑ IC501 PIN4



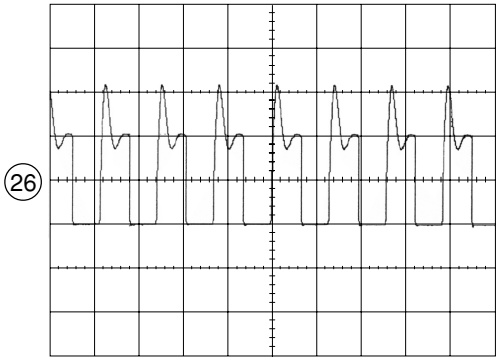
㉒ IC501 PIN7 ㉓ IC501 PIN5



㉔ CN601 PIN5: V+ ㉕ CN601 PIN4: V-

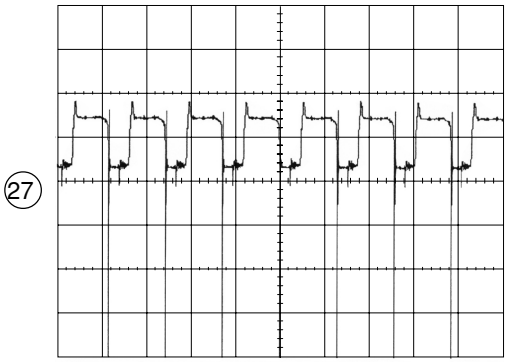


(26) Q602 C



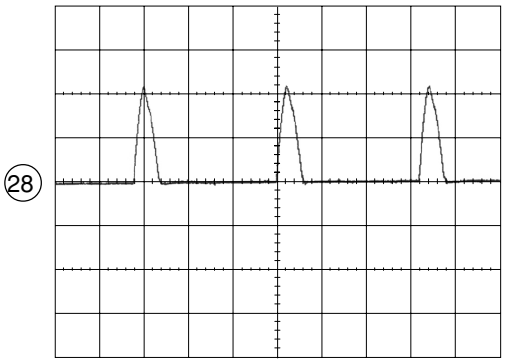
50 µs/div
50 V/div

(27) Q601 B



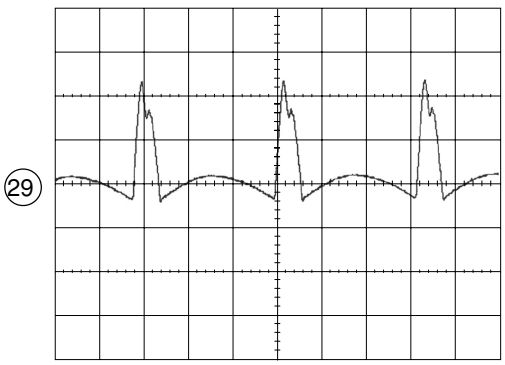
50 µs/div
2 V/div

(28) CN601 PIN1: H+



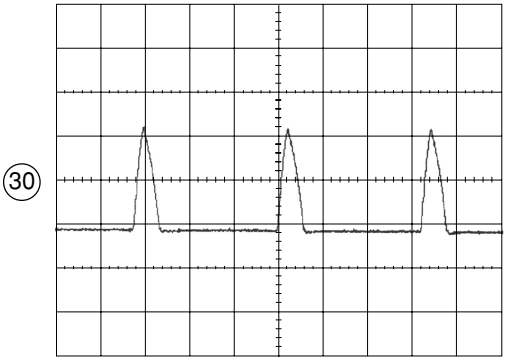
20 µs/div
500 V/div

(29) CN601 PIN2: H-



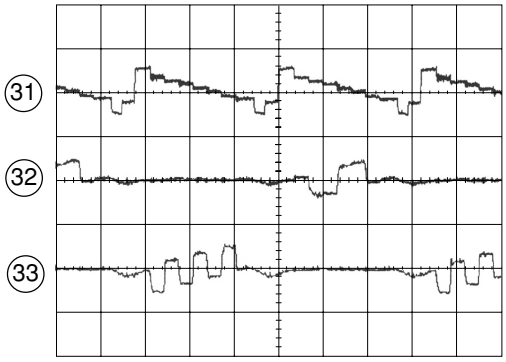
20 µs/div
100 V/div

(30) CNA802 PIN5: HEATER



20 µs/div
10 V/div

(31) IC301 PIN39: Y IN (32) IC301 PI N38: R-Y IN
(33) IC301 PIN37: B-Y IN

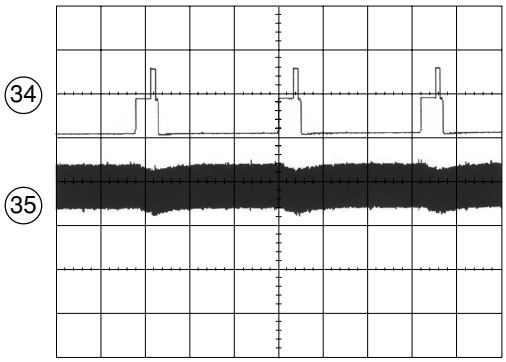


20 µs/div
1 V/div

20 µs/div
1 V/div

20 µs/div
500 mV/div

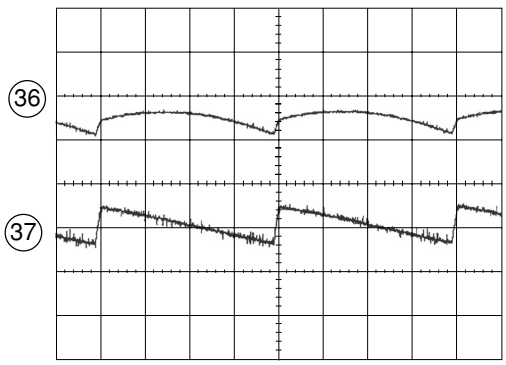
(34) IC301 PIN34: SCP-OUT (35) IC301 PIN29: S-ID/CW-OUT



20 µs/div
5 V/div

20 µs/div
500 mV/div

(36) CNA501 PIN1: V- (37) CNA501 PIN2: IV.DET

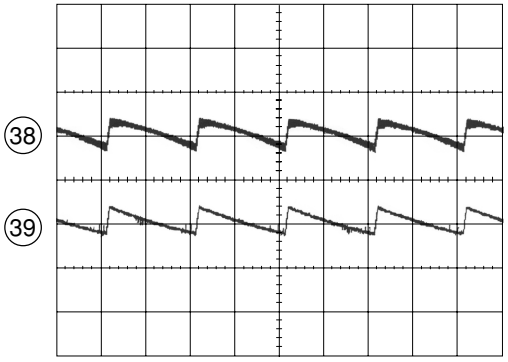


5 ms/div
5 V/div

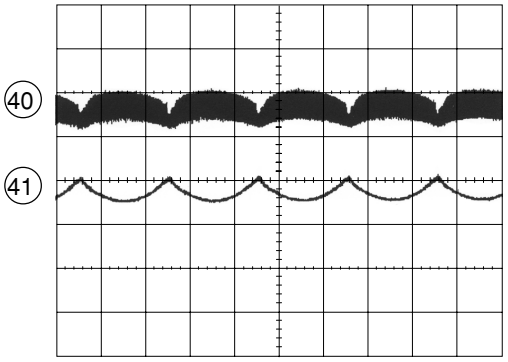
5 ms/div
2 V/div

2. PIN C.B

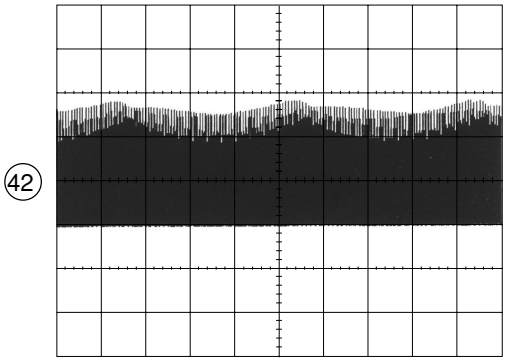
(38) IC651 PIN5 (39) IC651 PIN6



(40) Q651 B (41) Q651 C

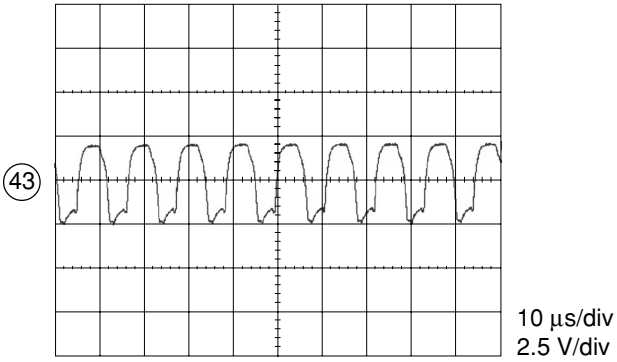


(42) D652 CATHODE

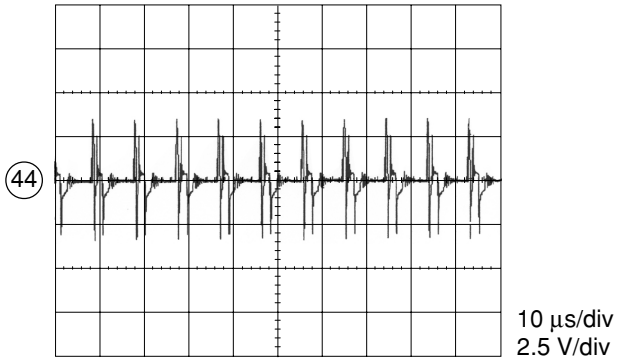


3. MAIN C.B (POWER SUPPLY SECTION)

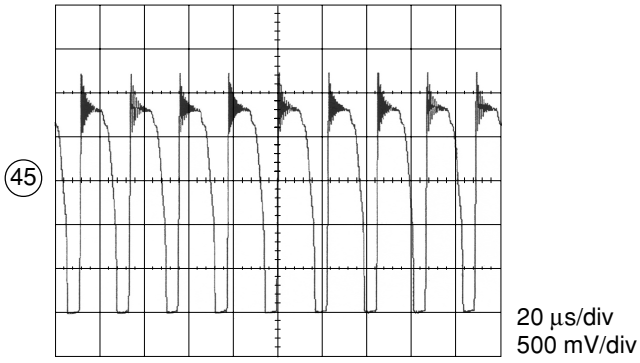
(43) IC801 PIN1



(44) IC801 PIN2

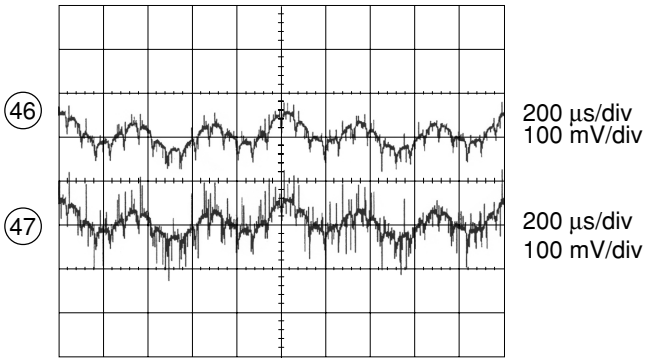


(45) IC801 PIN3

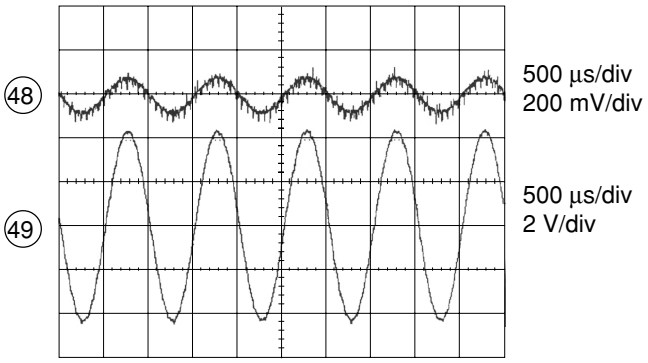


4. AUDIO C.B

(46) IC401 PIN15: L IN (47) IC401 PIN7: L OUT

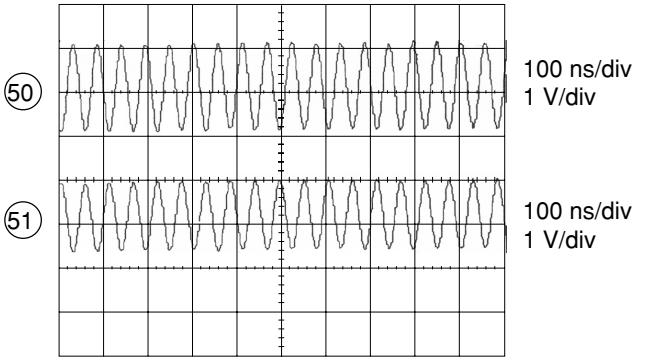


(48) IC410 PIN2: CH1 IN (49) IC410 PIN12: CH1 OUT

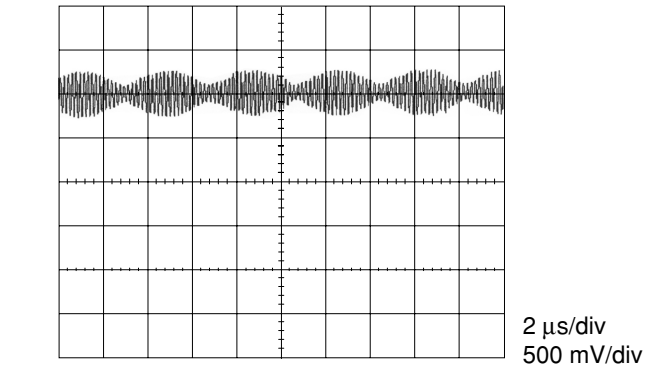


5. NICAM C.B

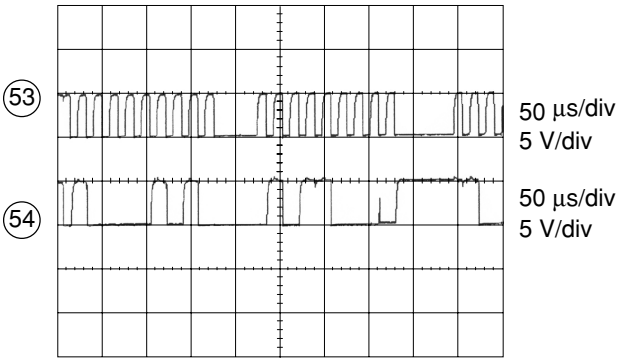
(50) IC701 PIN52: XTAL-OUT (51) IC701 PIN51: XTAL-IN



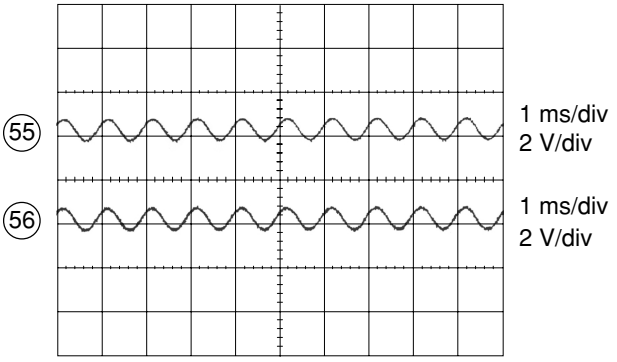
(52) IC701 PIN47: ANA-IN+



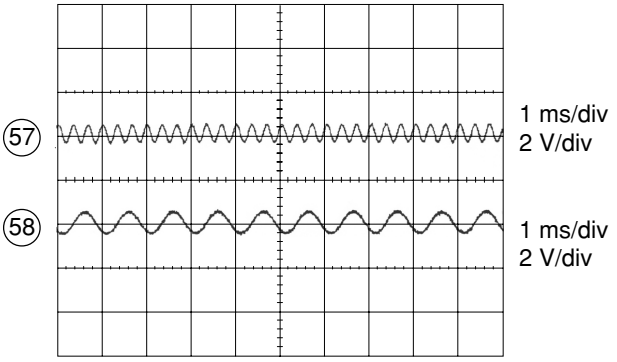
(53) IC701 PIN7: I²C-CL (54) IC701 PIN8: I²C-DA



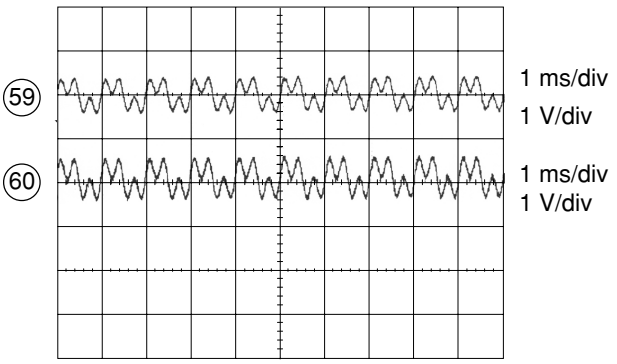
(55) IC701 PIN25: TU-L (56) IC701 PIN24: TU-R
SETTING: NICAM MONO 1 kHz



(57) IC701 PIN25: TU-L (58) IC701 PIN24: TU-R
SETTING: NICAM STEREO LCH = 3 kHz RCH = 1 kHz
TV: STEREO

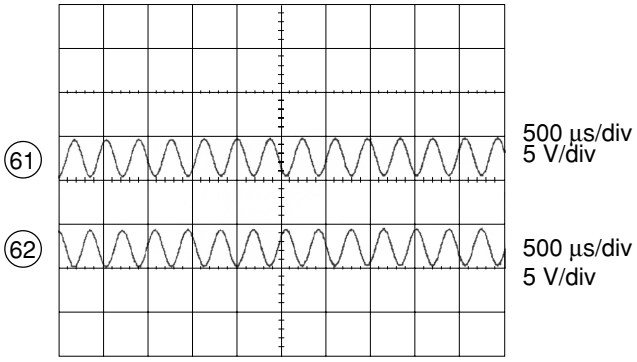


(59) IC701 PIN25: TU-L (60) IC701 PIN24: TU-R
SETTING: NICAM STEREO LCH = 3 kHz RCH = 1 kHz
TV: MONO

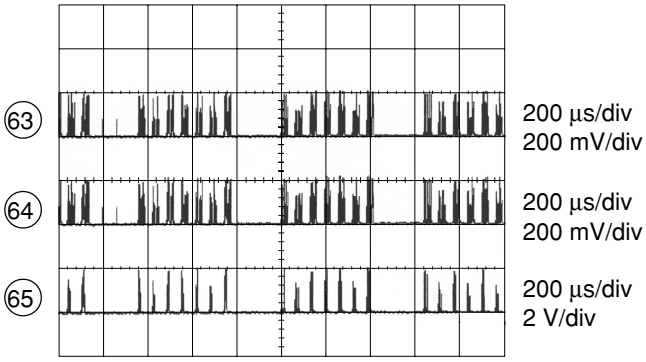


6. TEXT C.B

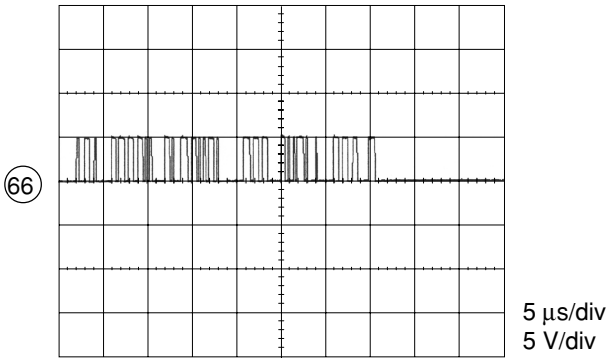
(61) IC751 PIN42: XTAL0 (62) IC751 PIN41: XTAL1



(63) IC751 PIN34: R (64) IC750 PIN33: G
(65) IC751 PIN32: B

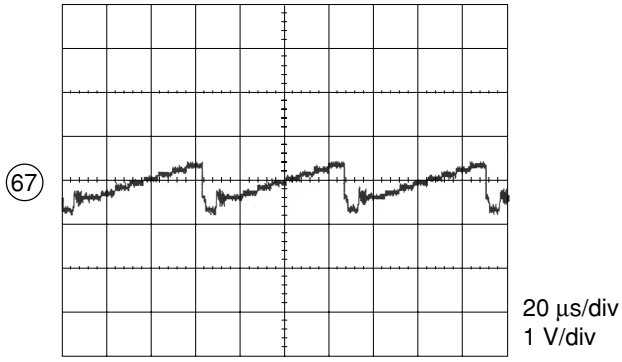


(66) IC751 PIN35: VDS
SETTING: TEXETEXT MIX MODE

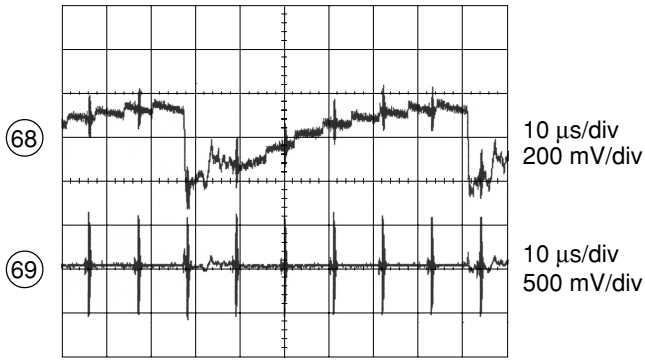


7. NK C.B (VM SECTION)

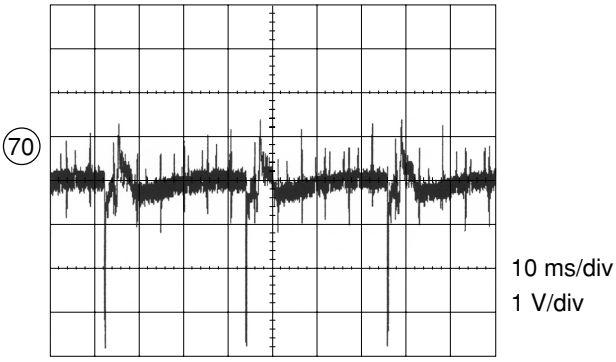
(67) CN951 PIN3: YOUT



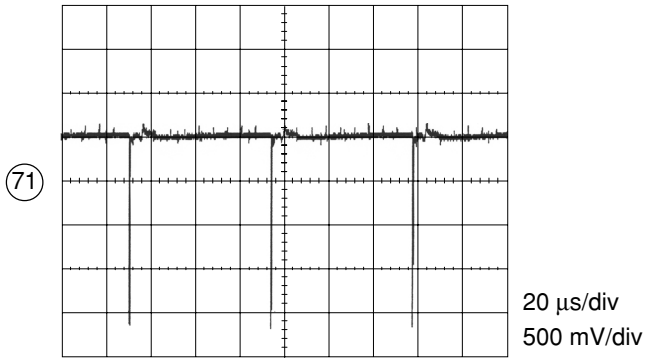
(68) Q982 E (69) Q952 B



(70) Q953 B

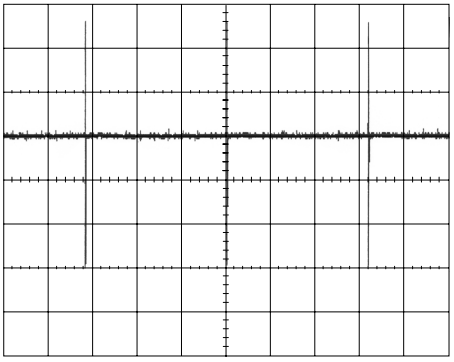


(71) Q955 E



(72) CN952 PIN1: VM OUT

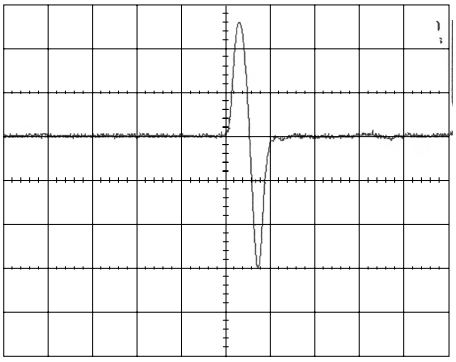
(72)



20 μs/div
10 V/div

(73) CN952 PIN1: VM OUT

(73)



500 ns/div
10 V/div

IC DESCRIPTION

IC, TMP87CP38N-1N14/ TMP87CP38N-1N15 THAI

Pin No.	Pin Name	I/O	Description
1	VSS	–	GND.
2	POWER	O	Power control output (H = ON).
3	SIF A	O	Sound IF SW A (refer to table 1).
4	SIF B	O	Sound IF SW B (refer to table 1).
5	BBE	O	BBE select output.
6	Q SUR	O	Q Surround switching (H = ON).
7	$\overline{\text{N RESET}}$	O	NICAM reset (H= ON/L = Reset).
8	$\overline{\text{BBS}}$	O	Bass boost / s-woofer (L= Boost).
9	VOL	O	Main volume control output. (Not used)
10	$\overline{\text{EXT}}$	I	EXT bus sw (L= EXT).
11	SCL1	O	I^2C-Bus CH1 clock output.
12	SDA1	O	I^2C-Bus CH1 data output.
13	H SYNC	I	SYNC detect input.
14	KEY IN	I	Key input.
15	D DET1	I	Power condition 1 (Mid = Good, L/H = Bad).
16	D DET2	I	Power condition 2 (Mid = Good, L/H = Bad).
17	AFC	I	Tuner AFT voltage input.
18	STEREO	I	MSP key input. (Not used)
19	SGV	O	Video signal generate (Factory) output. (Not used)
20	SUFFIX	I	Feature select (initial) input. (Not used)
21	VSS	–	GND.
22	OSD R	O	OSD red output.
23	OSD G	O	OSD green output.
24	OSD B	O	OSD blue output.
25	OSD Y	O	OSD blanking output.
26	$\overline{\text{HD}}$	I	OSD H SYNC input.
27	$\overline{\text{VD}}$	I	OSD V SYNC input.
28	OSC1	–	OSD dot clock.
29	OSC2	–	OSD dot clock.
30	TEST	–	GND.
31	XIN	I	8 MHz clock input.
32	XOUT	O	8 MHz clock output.
33	$\overline{\text{RESET}}$	I	Reset input (L= Reset).
34	LN MUTE	O	Line out mute output (H = Mute).
35	SP MUTE	O	Speaker mute output (H = Mute).
36	$\overline{\text{RMC}}$	I	Remote control signal input.
37	SCL0	O	I^2C-Bus CH2 clock output.
38	SDA0	O	I^2C-Bus CH2 data output.
39	SEL1	O	Selecting tuner receiving band (refer to table 2).
40	SEL2		
41	WAKEUP	O	LED(wakeup timer). H = ON timer, L = Standby.
42	VDD	–	Power supply.

TABLE 1

IC201	4.5MHZ	5.5MHZ	6.0MHZ	6.5MHZ
PIN10	H	H	L	L
PIN9	H	L	L	H

TABLE 2

	TUNER	VIDEO 1	VIDEO 2
SEL 1	H	H	L
SEL 2	H	L	H

IC, TA1275AZ

Pin No.	Pin Name	I/O	Description
1	Y OUT	O	The output pin for Y signal.
2	DL-MODE	O	The pin for controlling the Y processing mode: to VCC: 5.5MHz trap ; open: 5.5MHz trap + D.L ; to GND: DL. (Not used)
3	R-Y OUT	O	The output pin for demodulated R-Y signal.
4	R-Y CONT	I	The pin for controlling the black offset level. (Not used)
5	B-Y OUT	O	The output pin for demodulated B-Y signal.
6	B-Y CONT	I	The pin for controlling the black offset level. (Not used)
7	ID-FIL	I	The pin for connecting the SECAM ident filter capacitor.
8	R-Y IN	I	The input pin for external R-Y signal. (Not used)
9	VCC	–	The VCC pin for Y/C processing block.
10	B-Y IN	I	The input pin for external B-Y signal. (Not used)
11	GND	–	The GND pin.
12	F0-FIL	I	The pin for connecting a capacitor for automatic adjusting circuit.
13	C IN	I	The chroma signal input pin.
14	BELL-FIL	I	The pin for connecting a capacitor for the bell filter fo, 4.286MHz.
15	Y IN	I	The Y signal input pin.
16	BELLCONT	I	The pin for selecting the bell filter fo. fo + 70KHz: open ; fo + 35KHz: 20k to GND ; fo: to GND.
17	SCP-IN	I	The pin to input the sand castle pulse, SCP.
18	VCC	–	VCC pin for logic block.
19	4.43 CW	I	The pin for input 4.43MHz of carrier wave for self adjustment circuit.
20	H/H+Y-ID	I	The switch pin for selecting the ID detection mode. H + V: connected to VCC ; Auto search: opened ; H: connected to GND. (Not used.)
21	SYSTEM	I/O	The interface pin to the main processor.

IC, TB1240AN

Pin No.	Pin Name	I/O	Description
1	AFT-OUT	O	The terminal for AFT output and self-adjust out.
2	A-DE-EN	O	Audio output pin. (Not used)
3	VCC	–	Vcc of PIF circuit.
4	SIF IN	I	SIF input pin.
5	IF GND	–	GND of PIF circuit.
6	IF IN	I	IF signal input.
7	IF IN	I	IF signal input.
8	RF AGC	O	RF AGC output.
9	IF AGC	–	The terminal to be connected with an IF AGC filter.
10	APC-FIL	–	APC filter of chroma for demodulation.
11	4.43 XTAL	I	4.43MHz crystal oscillator.
12	Y/C GND	–	GND of Y/C circuit.
13	YS/YM	I	The terminal for switching of analog RGB mode and fast half tone.
14	R IN	I	Analog red signals input.
15	G IN	I	Analog green signals input.
16	B IN	I	Analog blue signals input.
17	RGB VCC	–	Vcc of RGB circuit.
18	ROUT	O	R signals output.
19	GOUT	O	G signals outout.
20	BOUT	O	B signals output.
21	ABL	I	ABL control.
22	V-RAMP	–	Connected with cap to make V.RAMP signal.
23	V-NFB	I	Input of V.sawteeth signal feedback.
24	V-OUT	O	Vertical drive signal output.
25	V-AGC	–	V.AGC cap.
26	SCL	I	I^2C bus clock input.
27	SDA	I/O	I^2C bus data input/output.
28	H-VCC	–	Vcc of vertical circuit.
29	S-ID/CW-OUT	I/O	PAL/NTSC ID output and SECAM ID input.
30	FBP-IN	I	FBP input.
31	SYNC-OUT	O	Composites sync output.
32	H-OUT	O	Horizontal drive signal output.
33	DEF-GND	–	GND of deflection circuit.
34	SCP-OUT	O	Sand castle pulse (VD+HD+GP) output.
35	E/W-OUT	O	E-W output.
36	DIG-VCC	–	VDD of digital block.
37	B-Y.IN	I	B-Y signals input.
38	R-Y.IN	I	R-Y signals input.
39	Y-IN	I	Y signal input.
40	H-AFC	–	H.AFC filter.
41	EHT-IN	I	The terminal for EHT. (Not used)

Pin No.	Pin Name	I/O	Description
42	D-GND	–	GND of digital block.
43	SYNC-IN	I	Input of the synchronous separation circuit.
44	BLK-DET	–	The terminal to be connected with an Black Det filter.
45	C-IN	I	Input of chroma signals.
46	Y/C-VCC	–	VCC of Y/C circuit.
47	IF DET OUT	O	Composite video signal and SIF signal detected in IF circuit.
48	LOOP-FIL	–	Loop filter for IF PLL.
49	VCO-GND	–	GND of VCO and SIF circuit.
50	VCO	–	The terminal connected with a tank coil for IF VCO.
51	VCO	–	The terminal connected with a tank coil for IF VCO.
52	VCO-VCC	–	VCC of IF VCO and SIF.
53	SIF	I	H.curve correction and SIF input.
54	RIPPLE	–	Connected with cap to stabilize the performance of SIF injection-lock circuit.
55	SIF/H-PIN	O	Output of 2nd SIF signal.
56	FM-DC-NF	I	The terminal for FM DC negative feedback and AGC filter for L-SECAM.

IC, MSP3417D

Pin No.	Pin Name	I/O	Description
1	TP	–	Test pin. (Not used)
2	NC	–	Not connected.
3	D-CRT-Out1	O	Digital control output 1. (Not used)
4	D-CRT-Out0	O	Digital control output 0. (Not used)
5	ADR-SEL	I	I^2C Bus address select. (Connected to 5V)
6	STANDBYQ	I	Standby. (Connected to 5V)
7	I^2C_CL	I/O	I^2C clock.
8	I^2C_DA	I/O	I^2C data.
9~15	TP	–	Test pin. (Not used)
16	DVSUP	–	Digital power supply 5V.
17	DVSS	–	Digital ground.
18	TP	–	Test pin. (Not used)
19	NC	–	Not connected.
20	RESETQ	I	Power on reset.
21~22	TP	–	Test pin. (Not used)
23	VREF2	–	Reference GND 2 high voltage part.
24	TU-R	O	Loudspeaker out, right.
25	TU-L	O	Loudspeaker out, left.
26	NC	–	Not connected.
27~28	TP	–	Test pin. (Not used)
29	VREF1	–	Reference GND 1 high voltage part.
30	SC1-OUT-R	O	Scart output 1, right. (Not used)
31	SC1-OUT-L	O	Scart output 1, left. (Not used)
32	NC	–	Not connected.
33	AHVSUP	–	Analog power supply 8V.
34	CAPL-M	–	Volume capacitor MAIN.
35	AHVSS	–	Analog ground.
36	AGNDC	–	Analog reference voltage high voltage part.
37~40	NC	–	Not connected.
41	SC1_IN_L	I	Scart input 1 in, left.
42	SC1_IN_R	I	Scart input 1 in, right.
43	VREFTOP	–	Reference voltage IF A/D converter.
44	MONO-IN	I	Mono input.
45	AVSS	–	Analog ground.
46	AVSUP	–	Analog power supply 5V.
47	ANA-IN1+	I	IF input 1.
48	ANA-IN–	–	IF common.
49	NC	–	Not connected.
50	TESTEN	–	Test pin. (Connected to GND)
51	XTAL_IN	I	Crystal oscillator.
52	XTAL_OUT	O	Crystal oscillator.

VOLTAGE CHART

Test condition

AC Voltage:

230V

Signal input:

1. Video in (LINE 1 IN)
   Video : PAL COLOR BAR
   Audio : 1kHz, -8dBm
2. RF IN fp = 471.25MHz, 60dBμ; P/S = 10dB
   Video : PAL COLOR BAR
   Audio : 1kHz, 30kHz DEV
3. NICAM
   MONO: 1kHz (TV setting: MONO)
   Stereo: Lch = 3kHz; Rch = 1kHz (TV setting: stereo)
   DUAL: Lch = 3kHz; Rch = 1kHz (TV setting: sound channel 1)

Setting:

Volume: 32

Sound effect: default (Super BASS: ON;
BASS/TREBLE/BALANCE: Center;
Q SURROUND/BBE: OFF)

1. MAIN C.B

REF NO.	MODE	
	STD	STANDBY
Q2		
G	0.1	0
D	5	5
S	-	-
Q3		
G	4	0
D	0.9	1.8
S	5	2.5
Q101		
B	8.9	0
C	0.6	0.1
E	1.4	0
Q102		
G	0.9	1.4
D	8.4	0
S	0	0
Q103		
G	8.4	0
D	0	0.1
S	0	0
Q105		
B	1.4	0
C	0	0
E	2	0.1
Q107		
B	3.4	0
C	9	0
E	2.8	0
Q108		
B	3.5	0
C	9	0.1
E	2.8	0
Q301		
B	11.3	9.5
C	11.9	1.5
E	11.9	9.6
Q302		
G	4.6	0
D	0	9.5
S	0	0
Q303		
B	4.4	0.1
C	0.3	0.1
E	0	0

REF NO.	MODE	
	STD	STANDBY
Q501		
B	0	0
C	4.4	0.1
E	0	0
Q601		
B	0	0
C	18.9	120
E	0	0
Q602		
B	0.37	0
C	55	120
E	0	0
Q603		
B	0	0
C	4.1	0.1
E	0	0
Q801		
B	14.4	10.5
C	3.2	0.7
E	15	11.1
Q802		
B	0	0
C	85	83.2
E	119	119
Q803		
G	0	5
D	5.2	0.1
S	0	0
Q804		
G	45	0
D	0	5
S	5	5
Q901		
B	3.2	0
C	0	0
E	3.8	0
Q902		
B	3.9	0
C	9	0.1
E	2.8	0
Q903		
B	3.4	0
C	9	0.1
E	2.8	0

REF NO.	MODE	
	STD	STANDBY
Q904		
B	-	1.2
C	3.8	0
E	0	0
Q905		
B	-	1.2
C	0	0
E	0	0
Q906		
B	0.2	1.2
C	0	0
E	0	0
Q908		
B	4	0
C	9	0.1
E	3.4	0
Q909		
B	4	0
C	9	0.1
E	3.4	0
Q910		
B	2.1	0
C	6.7	0.1
E	1.5	0
Q911		
B	6.7	0.1
C	2.5	0
E	7.4	0.1
Q912		
B	2.5	0
C	0	0
E	3.2	0

REF NO.	MODE		
	VEDIO IN	TUNER	STANDBY
IC1			
1	0	0	0
2	5	5	0
3	0	0	0.9
4	5	5	0.9
5	5	5	0
6	5	5	0
7	5	0	1.2
8	5	5	3
9	0	0	1.6
10	5	5	5
11	5	5	5
12	5	5	5
13	4.6	5	2.3
14	5	5	5
15	0	0	0
16	2.5	2.5	2.5
17	2.5	0	0
18	5	0	0
19	0	0	0
20	0.6	0	0
21	0	0	0
22	0	0	0
23	0	0	0
24	0	0	0
25	0	0	0
26	4.1	0.1	0.1
27	4.4	0.1	0.1
28	5	5	5
29	5	5	5
30	0	0	0
31	2.2	2.1	2.1
32	2.4	2.4	2.4
33	5	5	5
34	0	0	1.07
35	0	0	2.3
36	5	5	5
37	4.8	0	5
38	4.8	4.8	5
39	5.3	5.3	1.6
40	0	5.3	1.6
41	0	0	0
42	5	5	5
IC2			
1	5	5	5
2	0	0	0
3	5	5	5
IC3			
1	5	5	5
2	5	5	5
3	0	0	0
IC4			
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	5	5	5
6	5	5	5
7	0	0	0
8	5	5	5

REF NO.	MODE		
	VEDIO IN	TUNER	STANDBY
IC101			
1	3.1	3.1	0
2	2.5	2.5	0
3	1.9	1.9	0
4	3.1	3.1	0
5	3.1	3.1	0
6	0	0	0
7	0	0	0
8	0	0	0
9	5	5	0.9
10	0.3	0.3	0.9
11	0.5	0.5	0
12	2.8	2.8	0
13	2.8	2.8	0
14	2.8	2.8	0
15	2.8	2.8	0
16	5	5	0.1
IC501			
1	0	0	0
2	12.3	12.3	0.5
3	24.4	24.4	7.6
4	0.8	0.8	0
5	0.9	0.7	0.1
6	24.3	24.3	0
7	1.3	1.4	0
IC801			
1	2.7	2.7	0.2
2	0	0	0
3	290	290	3.8
4	16.7	16.7	13.2
5	0	0	0
IC802			
1	12	12	9.6
2	0	0	0
3	5	5	5
IC803			
1	12.1	12.1	0.1
2	0	0	0
3	9	9	0.1

REF NO.	MODE			
	VIDEO IN	TUNER/PAL	TUNER/SECAM	STANDBY
IC302				
1	2.7	2.83	2.7	0
2	2	2	2	0
3	2.4	2.6	2.4	0.1
4	2.6	2.6	2.6	0
5	2.4	2.6	2.4	0
6	2.6	2.6	2.6	0
7	4.4	2.1	4.4	0
8	2.5	2.6	2.6	0
9	5	5	5	0
10	2.5	2.6	2.6	0
11	0	0	0	0
12	2.6	2.7	2.65	0.2
13	4.3	4.4	4.3	0.1
14	2.5	2.6	2.55	0.2
15	2.7	2.8	2.65	0.2
16	0	0	0	0
17	0.7	0.7	0.7	0
18	5	5	5	0.1
19	2.7	2.7	2.7	0
20	0	0	0	0
21	1.4	3.3	1.4	0.2

REF NO.	MODE		
	VEDIO IN	TUNER	STANDBY
IC804			
1	9	9	0.1
2	0	0	0
3	5	5	0.1
IC901			
1	0	0	0
2	2.1	2.1	0
3	2.1	2.1	0
4	2.1	2.1	0
5	2	2	0.3
6	0	0	-
7	0	0	0
8	0	0	0
9	6.5	6.5	0.9
10	1.5	0	0.9
11	0	0	0
12	0	0	0
13	0	0	0
14	0	0	0
15	0	0	0
16	9	9	0
IC902			
1	0	0	0
2	5.1	-	-
3	5.1	4	0
4	4	4	0
5	4.8	4.8	0
6	0	0	0.1
7	0	0	0
8	0	0	0
9	6.5	6.5	0.9
10	1.5	6.5	0
11	4	4	0
12	0	0	0
13	5	4	0.1
14	4.8	4.8	0.3
15	5	-	0
16	9	9	0.1

REF NO.	MODE				
	VIDEO IN	TUNER/ PAL CB	TUNER/ NTSC CB	TUNER/ SECAM CB	STANDBY
IC301					
1	1.9	2	2.6	2	0
2	4	4	4	3.7	-
3	8.7	8.7	8.7	8.9	0
4	4.9	4.9	3.9	4.9	0
5	0	0	0	0	0
6	-	-	0.9	-	0
7	1.9	1.9	1.9	1.9	0
8	2.8	2.8	2.8	2.8	0
9	4.1	4.1	4.1	4.1	0
10	2.2	2.2	2.2	2.1	0
11	-	-	-	-	0
12	0	0	0	0	0
13	0	0	0	0	0
14	2.7	2.7	2.7	2.7	0
15	2.7	2.7	2.7	2.7	0
16	2.7	2.7	2.7	2.7	0
17	8.9	8.9	8.9	8.9	0
18	2.9	2.9	2.9	2.9	0
19	2.9	2.9	2.9	2.93	0
20	2.8	2.8	2.8	2.8	0
21	5.9	5.9	5.9	5.9	0
22	4	4	4	4	0
23	4.8	4.6	4.8	4.6	0
24	0.77	0.77	0.77	0.77	0
25	1.77	1.5	1.77	1.5	0
26	4.7	4.9	4.7	4.9	5.1
27	4.8	4.8	4.8	4.8	5.1
28	9.3	9.3	9.3	9.3	1.5
29	3.2	3.2	3.2	1.4	0
30	1.45	1.45	1.45	1.45	0
31	4.6	4.6	4.6	4.6	0
32	2	2	2	2	0
33	0	0	0	0	0
34	1.2	1.2	1.2	1.2	-
35	4.5	3.5	4.5	3.5	-
36	4.6	4.6	4.6	4.6	1.3
37	2.5	2.5	2.5	2.5	-
38	2.5	2.5	2.5	2.5	-
39	2.8	2.8	2.8	2.8	0
40	7.2	7.2	7.2	7.2	0
41	1	1	1	1.1	-
42	0	0	0	0	0
43	2.8	2.9	2.8	2.9	0
44	2.2	2.4	2.2	2.7	0
45	-	-	-	-	0
46	4.8	4.8	4.8	4.8	0
47	3.5	3.5	3.5	3.5	0
48	4.6	4.6	4.6	4.6	0
49	0	0	0	0	0
50	7.9	7.9	7.9	7.9	0
51	7.9	7.9	7.9	7.9	0
52	8.7	8.7	8.7	8.7	0
53	4.6	4.6	4.6	4.6	0.4
54	5.6	5.6	5.6	5.6	0.4
55	3.4	3.4	3.4	3.5	0
56	5.5	5.9	5.5	3.4	0.6

2. AUDIO C.B

REF NO.	MODE	
	STD	STANDBY
Q401		
B	0.6	0
C	0	0.8
E	0	0
Q402		
B	0.6	0
C	0	0.8
E	0	0
Q404		
B	-	0
C	0	0
E	0	1.26
Q407		
B	-	1.26
C	0	-
E	0	-
Q408		
G	0	5
D	11	0
S	0	0
Q409		
G	4.6	0
D	0	5
S	0	0
Q414		
B	8.9	0.1
C	-	-
E	8.8	-
IC401		
1	4.1	-
2	4.1	-
3	4.6	0
4	0.1	0.1
5	4.1	-
6	4.1	-
7	-	-
8	0	0
9	4.1	-
10	4.1	-
11	4.1	-
12	4.1	-
13	4.1	-
14	4.8	-
15	4.1	-
16	8.9	0.1
IC402 (BBE ON)		
1	4.5	-
2	4.5	-
3	4.5	-
4	4.5	-
5	4.5	-
6	4.5	-
7	4.5	-
8	0	0.8
9	0	0.8
10	0	0.8
11	0	0
12	8.9	0.1
13	4.5	-
14	4.5	-
15	4.5	-
16	4.5	-
17	4.5	-

REF NO.	MODE	
	STD	STANDBY
18	4.5	-
19	4.5	-
20	4.5	0.3
IC402 (BBE OFF)		
1	4.5	0.1
2	4.5	0.1
3	4.5	0.1
4	4.5	-
5	4.1	-
6	4.1	-
7	4.5	-
8	0	0
9	4.8	5
10	4.8	5
11	5	0.1
12	5	0.1
13	0	0
14	4.5	-
15	4.1	-
16	4.1	-
17	4.5	-
18	4.5	0.1
19	4.5	0.1
20	8.9	0.1
IC404		
1	2.9	0.1
2	4.5	0.1
3	4.5	0.1
4	4.5	0.1
5	0	0
6	4.5	0.1
7	4.5	0.1
8	4.5	0.1
9	8.9	0.1
IC409		
1	4.5	0.1
2	4.5	0.1
3	4.5	0.1
4	4.5	0.1
5	4.5	0.1
6	4.5	0.3
7	1	0.3
8	0	0
9	4.7	0.9
10	-	-
11	4.5	-
12	4.5	0.1
13	4.5	0.1
14	4.4	0.1
15	4.5	0.1
16	8.9	0.1
IC410		
1	-	0.1
2	0	0.1
3	23.7	-
4	0	0
5	0	0
6	-	-
7	11.8	0
8	0.1	1.83
9	0	0
10	24.8	25.8
11	11	0
12	11.8	0

3. NICAM C.B

REF NO.	MODE		
	STEREO	DUAL	MONO
IC701			
1	0.5	-	-
2	-	-	-
3	0	0	0
4	0	0	0
5	4.7	4.7	4.7
6	4.7	4.7	4.7
7	4.8	4.7	-
8	4.7	4.7	-
9	2.3	2.3	-
10	2.3	2.3	2.3
11	0.3	2.3	2.3
12	0.5	-	-
13	0.5	-	-
14	0.5	-	-
15	0.5	-	-
16	4.7	4.7	4.7
17	0	0	0
18	-	-	-
19	0	-	-
20	5	5	5
21	0	0	0
22	0	0	0
23	0	0	0
24	0	2.1	2
25	0	2.1	2
26	-	-	-
27	3.7	3.7	3.7
28	3.7	3.7	3.7
29	0	0	0
30	3.7	3.7	3.7
31	3.7	3.7	3.7
32	-	-	-
33	8	8	8
34	7	6	6
35	0	0	0
36	3.7	3.7	3.7
37	-	-	-
38	-	-	-
39	-	-	-
40	-	-	-
41	3.7	3.7	3.7
42	3.7	3.7	3.7
43	2.6	2.6	2.6
44	3.7	3.7	3.7
45	0	0	0
46	4.7	4.7	4.7
47	1.5	1.5	1.5
48	1.5	1.5	1.5
49	-	-	-
50	0	0	0
51	2.1	2.2	2.2
52	2	2	2

REF NO.	MODE	
	STD	STANDBY
Q710		
B	2.5	0.1
C	1.9	0.1
E	7	0
Q711		
B	7	0.1
C	9	0.1
E	6.3	0
Q721		
B	8.7	0.1
C	9	0.1
E	8	0
Q731		
B	-	-
C	9	0.1
E	0.54	0
Q741		
B	4.65	0.1
C	9	0.1
E	4	0

4. PIN C.B

REF NO.	MODE	
	STD	STANDBY
IC651		
1	23.9	-
2	0	0
3	0	0
4	0	0
5	9.5	-
6	9.7	-
7	2.35	-
8	24.3	-
Q651		
B	0	0
C	27.2	0
E	0.53	0

5. TEXT C.B

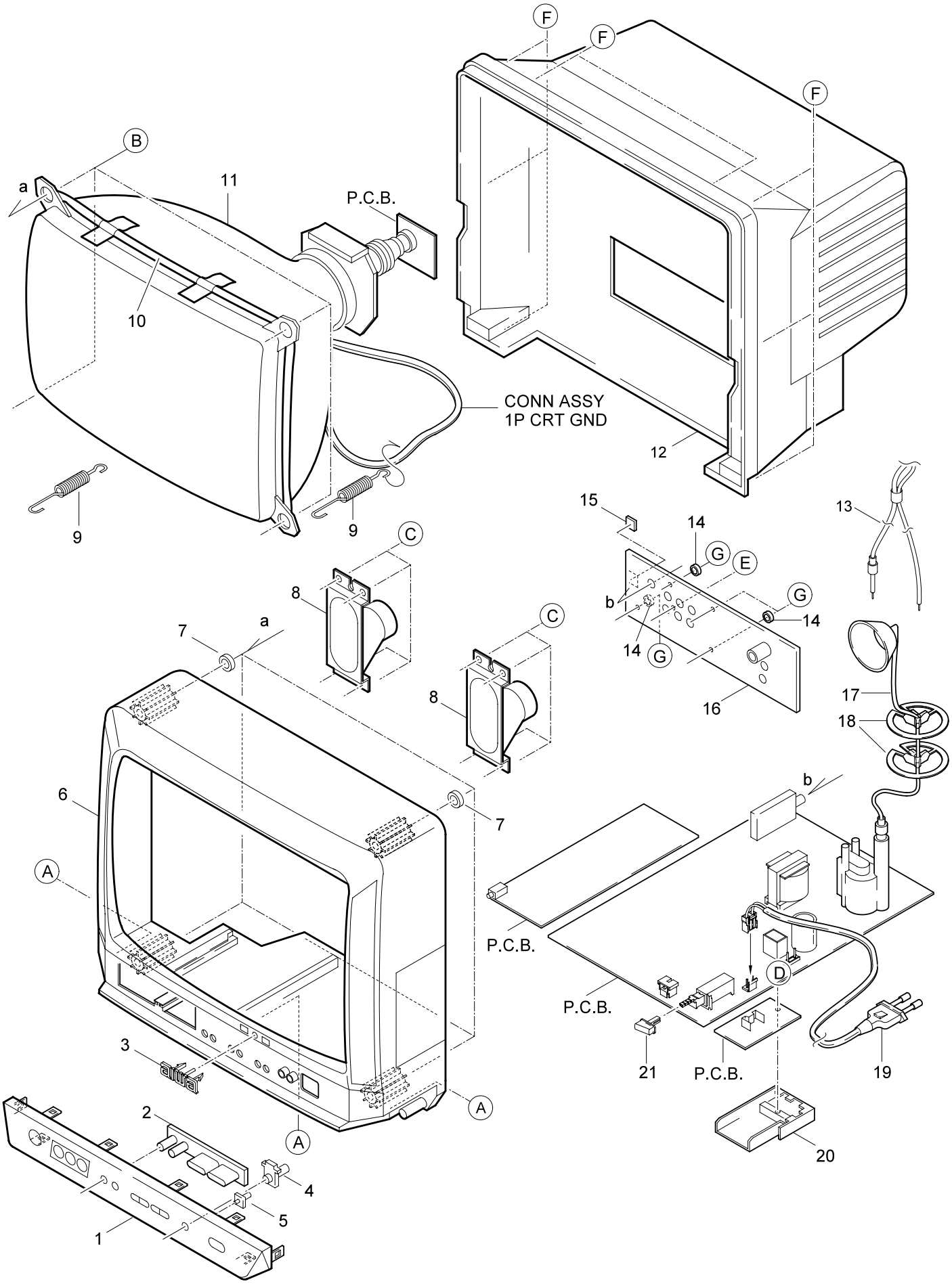
REF NO.	MODE	
	NORMAL	TEXT ON
IC751		
1	4.85	4.85
2	4.85	4.85
3	4.85	4.85
4	4.85	4.85
5	4.85	4.85
6	4.85	4.85
7	4.85	4.85
8	4.85	4.85
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	4.85	4.85
15	4.85	4.85
16	0	0
17	0	0
18	4.85	4.85
19	4.85	4.85
20	4.85	4.85
21	4.85	4.85
22	2.2	2.2
23	-	-
24	2	2
25	2.4	2.4
26	0	2.4
27	0	2.4
28	0	0
29	-	-
30	4.85	0
31	2.4	2.1
32	0	0.4
33	0	0.4
34	0	0.4
35	0	4.8
36	4.1	4.1
37	4.3	4.4
38	4.85	4.85
39	4.85	4.85
40	0	0
41	2.4	2.4
42	2.6	2.6
43	0	0
44	4.85	4.85
45	0	0
46	4.85	4.85
47	4.85	4.85
48	4.85	4.85
49	5	4.9
50	5	5
51	0	0
52	0	0

REF NO.	MODE		
	NORMAL	TEXT ON	STANDBY
IC752			
1	0	0	0
2	0	0	0
3	0	0	0
4	0	0	0
5	4.85	4.85	0.2
6	4.85	4.85	0.2
7	0	0	0.3
8	4.85	4.85	0.2
Q751			
B	0	0.36	0
C	0	0	0
E	12.4	6.2	-

6. NK C.B

REF NO.	MODE	
	STD	STANDBY
Q901		
B	9	0.1
C	135	118
E	8.5	0.1
Q902		
B	9	0.1
C	137.6	118
E	8.5	0.1
Q903		
B	9	0.1
C	137.3	118
E	8.5	0.1
Q904		
B	2.95	0.2
C	8.5	0.1
E	2.54	0
Q905		
B	2.9	0.2
C	8.5	0.1
E	2.5	0
Q906		
B	2.86	0.2
C	8.5	0.1
E	2.5	0
Q907		
B	0	0
C	8.8	0
E	0.2	-0.4
Q908		
B	1.24	0
C	0	0
E	1.93	0

MECHANICAL EXPLODED VIEW 1 / 1



MECHANICAL PARTS LIST 1 / 1

REF. NO.	PART NO.	KANRI NO.	DESCRIPTION
1	8A-JEE-003-010		PANEL,MAIN SH
2	8Z-JE7-003-010		KEY,MAIN
3	8Z-JE7-008-010		BADGE,AIWA ST 52.5
4	8Z-JE7-006-010		LENS,RC
5	8Z-JE7-005-010		LENS,LED
6	8A-JE5-012-010		CABI,FR NH ASSY
7	8Z-JE7-205-010		W-G,10.5-20-2.5
8	8Z-JB3-620-010		SPKR,6*12 80HM 15W
9	83-JT1-217-010		SPR-E,EARTH
⚠ 10	8A-JEF-625-010		DGC,25 15OHM VRK
⚠ 11	8A-JE5-610-010		CRT,A60LST 196(0.35)<SHA>
⚠ 11	8A-JE5-609-010		CRT,A60LST 197(0)<SHR>
12	8A-JEF-002-010		CABI,REAR SH
13	8Z-JE7-610-010		HV-CABLE, 2P ZJE-7FOC-SCR
14	87-067-058-010		W-F,3.2-8-0.5 W/ADH
15	8A-JEF-007-010		PLATE,AC
16	8A-JEF-004-010		PANEL,REAR SH
17	8Z-JE7-609-010		ANODE-CAP,ZJE-7
18	87-A90-332-010		HLDR,SF-2001 HV CABLE
⚠ 19	8Z-JB6-695-010		AC CORD SET,KE BLK
20	8A-JEF-201-010		HLDR,PWB SH
21	8A-JEH-004-010		BTN,POWER 2
A	87-067-680-010		BVI T3+3-10
B	86-LBB-206-010		S-SCREW,ASSY TV5-40 W20
C	87-078-070-010		BVIT3B+4-12
D	87-067-822-010		BVT2+3-20 W/O SLOT
E	87-067-761-010		TAPPING SCREW, BVT2+3-10
F	87-067-844-010		BVT2+4-16 BLK
G	87-067-690-010		TAPPING SCREW, BVIT3+3-12

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow	DM	Metallic Orange	PT	Transparent Pink

アイワ株式会社 〒110-8710 東京都台東区池之端1-2-11 ☎03(3827)3111 (代表)
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